

# Qwest's Notice of Filing RT-00000F-02-0271 T-00000A-97-0238

Part 2 of 2 Barcode #0000111539

To review Part 1 of 2, please see Barcode #0000111529

#### SERVICES DESCRIPTION: TOTAL SERVICES RESALE

#### 1. Telecommunications Services Provided for Resale

- 1.1 At the request of AT&T, and pursuant to the requirements of the Act and FCC Rules and state regulations, USWC will make available to AT&T for resale any Telecommunications Service USWC currently provides, or may offer hereafter including, but not limited to, contract service arrangements, special arrangements, discount plans and promotions. USWC shall also provide Support Functions and Service Functions, as set forth in Sections 8 and 9 of this Attachment 2. The Telecommunications Services, Service Functions and Support Functions provided by USWC pursuant to this Agreement are collectively referred to as "Local Service".
- 1.2 This Attachment describes several services USWC shall make available to AT&T for resale pursuant to this Agreement. Services to be made available for resale are listed in Appendix A of this Attachment 2. This description of services is neither all inclusive nor exclusive. Except as may be noted elsewhere in this Agreement, all services or offerings of USWC to be offered for resale pursuant to the Act are subject to the terms herein, even though they are not specifically enumerated or described herein.

#### 2. General Terms and Conditions for Resale

#### 2.1 Primary Local Exchange Carrier Selection

USWC shall apply the principles set forth in Section 64.1100 of the FCC Rules, 47 C.F.R. §64.1100 as effective, to the process for end-user selection of a primary local exchange carrier. In accordance with the customer authorization process described elsewhere in this Agreement, USWC shall not require notification from the customer, another carrier, or another entity, in order to process an AT&T order for Local Service for a customer.

#### 2.2 Pricing

Language moved to Part A Section V

#### 2.3 Restrictions on Resale

AT&T may resell Local Services to provide Telecommunications Services to any

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and all classes of end-users, except that grandparented retail services shall be available for resale but limited to existing retail customers of the service; residential services, lifeline services, contract services, special arrangements, packaged services and discounted services and promotional offerings offered for a period of greater than ninety (90) days shall be limited to the same class of customers eligible to purchase that service from USWC.

2.3.2 USWC agrees to remove all other tariff restrictions which prohibit or limit the aggregation and resale of any such Telecommunication Services, including, but not limited to, CENTREX aggregation, feature and service aggregation, and resale of Telecommunications Services to another reseller. USWC will not prohibit, nor impose unreasonable or discriminatory conditions or limitations on, the resale of its Telecommunications Services. Promotions of less than ninety (90) days for service where benefits are realized within the time frame of the promotion need not be available for resale.

#### 2.4 Dialing Parity; Number Portability

USWC shall ensure that all AT&T customers experience the same dialing parity as similarly-situated customers of USWC services, such that, for all call types: (a) an AT&T customer is not required to dial any greater number of digits than a similarly-situated USWC customer; (b) the post-dial delay (time elapsed between the last digit dialed and the first network response), call completion rate and transmission quality experienced by an AT&T customer is at least equal in quality to that experienced by a similarly-situated USWC customer, and (c) an AT&T customer may retain its local telephone number, as long as such customer continues receiving service in the same central office serving area.

#### 2.5 Local Carrier Change Policy

- 2.5.1 USWC and AT&T will use the existing PIC process as a model, and the same or similar procedures for charges of local providers. For a local carrier change initiated by AT&T or an agent of AT&T to a customer, one of the following four procedures will constitute authorization for the change: (a) Obtain the customer's written authorization (Letter of Authorization or LOA); (b) Obtain the customer's electronic authorization by use of an 800 number; (c) Have the customer's oral authorization verified by an independent third party (third party verification); and/or (d) Send an information package, including a prepaid, returnable postcard, within three (3) days of the customer's request for a local carrier change, and wait fourteen (14) days before submitting the local carrier change to the previous carrier.
- 2.5.2 It is understood by USWC and AT&T that these procedures may be superseded or modified by FCC rules or industry standards.

2.5.3 USWC will provide AT&T authorization for a local carrier change initiated by a customer call to AT&T. In this event, AT&T will: (a) maintain internal records verifying the customer's stated intent to switch carriers; and (b) consistent with the FCC rules, produce the record in the event of a slamming dispute.

#### 2.6 Changes in Retail Service

- 2.6.1 USWC will notify AT&T of any changes in the terms and conditions under which it offers Telecommunications Services at retail to subscribers who are not telecommunications service providers or carriers, including, but not limited to, the introduction or discontinuance of any features, functions, services or promotions, at least forty-five (45) days prior to the effective date of such change.
- 2.6.2 USWC will provide AT&T with thirty (30) days' advance notice of the availability of new products for market testing or the ability to participate in new product market tests conducted by USWC.
- 2.6.3 AT&T can utilize any volume discounts USWC makes available to its end user customers.

#### 3. Directories

3.1 USWC's directory requirements are subject to the terms and conditions set forth in Attachment 4, Section 5 of this Agreement.

#### 4. Basic Service Requirements

#### 4.1 Call Types

- 4.1.1 USWC shall provide the following call types, features and functions to AT&T and its end users with no loss of feature or functionality: (a) dial tone and ringing; (b) capability for either dial pulse or touch tone; (c) flat and measured services; (d) speech recognition as available with other custom calling and CLASS features; (e) same extended area service free calling area; (f) 1 + IntraLATA toll calling; (g) InterLATA Toll calling; (h) international calling; (i) lines as well as trunks (DID, DOD); (j) analog and digital private line-all speeds; (k) off-premises extensions; (l) CENTREX; and (m) ISDN.
- 4.4.2 USWC will provide access for AT&T and all its end user customers to all call types, including, but not limited to, 500, 700, 800, 900, 976, exchanges and Dial Around

#### Services (10XXX).

- 4.4.3 USWC shall impose no restrictions on AT&T's customer's calling (e.g., there should not be a 750 minute limit on flat rate calling).
- 4.4.4 USWC will provide pre-subscription services for InterLATA toll services in accordance with currently accepted methods and procedures.

#### 5. Features Requirements

- 5.1 USWC will provide to AT&T descriptions of all features and how such features interact. These descriptions shall include, but not be limited to, how the features work with each other, the switch availability; and the switch type used to offer the features.
- 5.1.1 USWC will provide AT&T the ability to suspend and restore customer service, including vacation suspension service, at the direction of AT&T.

#### 5.2 End Office Features

5.2.1 USWC will provide to AT&T the same End Office Features that are available to USWC's end users, including, but not limited to, CLASS features, Custom Calling features, and AIN features.

#### 5.3 Call Blocking Features

5.3.1 USWC will provide to AT&T the same Call Blocking features as are available to USWC's own customers.

#### 5.4 Custom Calling

5.4.1 USWC will provide to AT&T and/or its end users the following Custom Calling features: (a) call forwarding; (b) call forwarding/busy; (c) call forwarding no answer; (d) call forwarding busy no answer; (e) call forwarding combination busy/no answer; (f) remote access to call forwarding; (g) call forwarding select; (h) three way calling; (i) speed dial 8 and 30; (j) call waiting; and (k) call hold.

#### 6. Requirements for Specific Services

#### 6.1 IntraLATA Toll

6.1.1 USWC will provide AT&T its IntraLATA toll service to AT&T for resale where 1+ IntraLATA toll presubscription is not available.

#### 6.2 Private Line Services

6.2.1 The following private line services shall be made available without restriction from USWC: (a) voice grade private line services; (b) off premise extensions; (c) foreign exchange line service; (d) point to point and multi-point Digital Services (9.6 kbps-56 kbps; Fractional DS-1; (e) DS-1 Services; (f) DS-3 services; (g) OC3 service (where available); (h) frame relay service; (i) packet switched services; (j) switched digital services; and (k) other private line services as they are made available.

#### 6.3 CENTREX Requirements

- 6.3.1 At AT&T's option and as they are available to USWC's own end users via interstate tariffs and state tariffs, price lists, price schedules, catalogs, or Individual Case Basis, AT&T may purchase the entire set of CENTREX features or a subset of any one or any combination of such features. The CENTREX Service provided for resale will meet the requirements set forth in the following provisions of this Section 6.3.
- 6.3.2 USWC shall provide to AT&T a list, by central office, of the current CENTREX or CENTREX-like features and functions offered by USWC within ten (10) days of the Effective Date of this Agreement. In addition, USWC shall provide to AT&T a list, by central office, of all CENTREX or CENTREX-like features and functions offered by USWC within ten (10) days of the Effective Date, and shall provide updates to said list forty-five (45) days prior to the effective date of the new features.
- 6.3.3 All service levels and features of CENTREX Service provided by USWC for resale by AT&T shall meet the service parity requirements set forth in this Agreement.
- 6.3.4 AT&T may aggregate the CENTREX local exchange and IntraLATA traffic usage of AT&T customers to qualify for volume discounts on the basis of such aggregated usage.
- 6.3.5 AT&T may aggregate multiple AT&T customers on dedicated access facilities.
- 6.3.6 USWC shall make CMS information available to AT&T at the common block level via an electronic interface, as provided to USWC's own end users.
- 6.3.7 AT&T may use remote call forwarding in conjunction with CENTREX Service to provide service to AT&T Local Service customers residing outside of the geographic

territory in which USWC provides local exchange service.

- 6.3.8 AT&T may purchase any and all levels of CENTREX Service for resale, without restriction on the minimum or maximum number of lines that may be purchased for any one level of service, equivalent to what is offered to USWC's own end users.
- 6.3.9 USWC will provide to AT&T the ability to suppress the need for AT&T customers to dial "9" when placing calls outside the CENTREX system.
- 6.3.10 USWC shall make available to AT&T for resale, at no additional charge, intercom calling among all AT&T customers within a common block who utilize resold CENTREX Service.

#### 6.4 CLASS and Custom Features Requirements

6.4.1 AT&T may purchase the entire set of CLASS and Custom features and functions, or a subset of any one or any combination of such features, on a customer-specific basis, without restriction on the minimum or maximum number of lines or features that may be purchased for any one level of service. CLASS features shall include, but not be limited to: caller identification, name and number; call screening; call tracing; and automatic call back on busy (\*69). USWC shall provide to AT&T a list of all such CLASS and Custom features and functions within ten (10) days of the Effective Date of this Agreement and shall provide updates to such list when new features and functions become available.

#### 6.5 Customer Financial Assistance Programs

6.5.1 Local Services provided to low-income subscribers, pursuant to requirements established by the appropriate state or federal regulatory body, include programs such as Lifeline, Voluntary Federal Customer Financial Assistance Program, and Link-Up America ("Voluntary Federal Customer Financial Assistance Programs"). When a USWC customer eligible for the Voluntary Federal Customer Financial Assistance Program chooses to obtain Local Service from AT&T, USWC shall forward all information regarding such customer's eligibility to participate in such programs to AT&T, in electronic format in accordance with the procedures set forth herein.

#### 6.6 E911/911 Services

6.6.1 For resold local service, USWC shall provide to AT&T, for AT&T customers, E911/911 call routing to the appropriate Public Safety Answering Point ("PSAP"). USWC shall provide and validate AT&T customer information to the PSAP in the same fashion as

it does for its own customers. USWC shall use its service order process to update and maintain, on the same schedule it uses for its end users, the AT&T customer service information in the ALI/DMS ("Automatic Location Identification/Database Management System") used to support E911/911 services.

- 6.7 Intentionally Deleted
- 6.8 Voice Mail
- 6.8.1 AT&T shall have the right to resell USWC's Voice Mail Services.
- 6.8.2 USWC shall make available the SMDI-E (Station Message Desk Interface-Enhanced), where available, or SMDI ("Station Message Desk Interface"), where SMDI-E is not available, feature capability allowing for Voice Mail Services. USWC shall make available, where available, the MWI (Message Waiting Indicator) stutter dialtone and message waiting light feature capabilities. USWC shall make available CF-B/DA (Call Forward on Busy/Don't Answer), CF/B (Call Forward on Busy), and CF/DA (Call Forward Don't Answer) feature capabilities allowing for Voice Mail services.
  - 6.9 Payphone Services
- 6.9.1 USWC will provide AT&T the ability to procure Payphone lines. These lines will include: (a) Semipublic Service two-way, outgoing only, and coinless outgoing; (b) coinless public telephone service; (c) semipublic extension service; and (d) Public Access Line ("PAL") service.
- 6.9.2 USWC shall offer for resale, at a minimum, the following Coin Line, PAL, and PAL Coinless features:

Billed Number Screening
Ability to "freeze" PIC selection
One (1) bill per line
Point of demarcation at the Network Interface location
Detailed billing showing all 1+ traffic on paper, diskette or electronic format
Touch-tone service
Option for listed or non-listed numbers
Access to 911 service
One (1) directory per line

6.9.3 At a minimum, USWC shall offer for resale the following Coin Line features:

Access to all CO intelligence required to perform answer detection, coin collection, coin return, and disconnect

**Answer Detection** 

Option to block all 1+ calls to international destinations

IntraLATA Call Timing

Option of one-way or two-way service on line

Flat Rate Service, where available

Originating line screening

USWC central office intelligence for rating and other functions

Option of measured service, where available

Ability to block any 1+ service that cannot be rated by the coin circuits/ TSPS/OSPS to the extent provided on USWC coin lines

Protection against clip on fraud to the extent provided on USWC coin lines Protection against blue box fraud to the extent provided on USWC coin lines Provision of Information Digit 27

6.9.4 At a minimum, USWC shall offer for resale the following PAL and PAL Coinless features:

Originating line screening
Two-way service option
Flat rate service based on

Flat rate service based on rate groups, where available

Option of one-way service on the line, where available

Option of measured service, where available

Ability to keep existing serving telephone numbers if cutover to

AT&T resale line incoming/outgoing screening

Provision of Information Digit 07

Provision of International Toll Denial Recognition Tone, when available

6.9.5 At a minimum, USWC shall offer for resale the following PAL Coin features:

Blocking for 1+ international, 10XXXX1 + international, 101XXXX1 + international, 1+900, N11, 976

Option to block all 1-700 and 1-500 calls

Line side supervision option

6.9.6 At a minimum, USWC shall offer for resale the following PAL Coinless feature:

Blocking for 1 + international, 10XXXX1 + international, 101XXXX1 + international, 1+900, N11, 976, 7 digit local, 1 +000

#### 7. Advanced Intelligent Network

- 7.1 AT&T may purchase the entire set of Advanced Intelligent Network ("AIN") features or functions, or any combination of such features or functions, on a customer-specific basis. The AIN services provided by USWC to AT&T for resale shall meet the following requirements:
- 7.1.1 Where AIN features are available to USWC's end users, those features will be available to AT&T for resale;
- 7.1.2 USWC shall provide full functionality on an equivalent basis to USWC's own end users through USWC's SCP and STP to AT&T on behalf of AT&T customers, including the Service Control Point Database and Intelligent Functions; and
- 7.1.3 All service levels, features and function components of AIN provided by USWC and offered for resale by AT&T shall be provided on an equivalent basis to USWC's own end users or as agreed to by the Parties.
- 7.1.4 AT&T may purchase any and all levels of AIN service for resale, without restriction on the minimum or maximum number of lines or features that may be purchased for any one level of service.

#### 8. Support Functions

- 8.1 Routing to Directory Assistance, Operator and Other Services
- 8.1.1 USWC shall make available to AT&T the ability to route:
- 8.1.1.1 all Local Directory Assistance calls (411, (NPA) 555-1212) dialed by AT&T customers directly to the AT&T Directory Assistance Services platform, where technically feasible and consistent with FCC rules; and
- 8.1.1.2 Local Operator Services calls (O+, O-) dialed by AT&T customers directly to the AT&T Local Operator Services platform, where technically feasible and consistent with FCC rules. Such traffic shall be routed over trunk groups between USWC end offices and the AT&T Local Operator Services Platform, using standard Operator Services dialing protocols of O+ or O-.
- 8.1.2 All direct routing capabilities described herein shall permit AT&T customers to dial the same telephone numbers for AT&T Directory Assistance, Local Operator

Service and any N11 service that similarly-situated USWC customers dial for reaching equivalent USWC services.

8.1.3 USWC, no later than thirty (30) days after the Effective Date, shall provide to AT&T the emergency public agency (e.g., police, fire, ambulance) telephone numbers linked to each NPA-NXX. Such data will be transmitted via a mutually acceptable Electronic Interface where available. USWC will electronically transmit to AT&T, in a timely manner, all changes, alterations, modifications and updates to such data base. Where electronic interfaces are not available, USWC will provide a manual list of emergency numbers.

#### 8.2 Busy Line Verification and Emergency Line Interrupt

- 8.2.1 At the request of AT&T operators or customers, USWC operators will perform Busy Line Verify and/or Busy Line Interrupt operations where such capability exists.
- 8.2.2 Only one BLV attempt will be made per customer operator bureau call, and a charge shall apply whether or not the called party releases the line. The operator bureau will make only one BLVI attempt per customer operator telephone call, and the applicable charge applies whether or not the called party releases the line.

#### 8.3 Access to the Line Information Database

8.3.1 USWC shall use its service order process to update and maintain, on the same schedule that it uses for its end users, the AT&T resold customer service information in the Line Information Database ("LIDB").

#### 8.4 Telephone Line Number Calling Cards

8.4.1 Effective ten (10) business days after the date of an end-user's subscription to AT&T Service or within twenty-four (24) hours after AT&T has notified USWC that it has replaced the subscriber's calling card, whichever is earlier, USWC will terminate its existing telephone line number-based calling cards and remove any USWC-assigned telephone line calling card number (including area code) ("TLN") from the LIDB. AT&T may issue a new telephone calling card to such customer, utilizing the same TLN, and AT&T shall have the right to enter such TLN in the LIDB for calling card validation purposes. USWC will assume responsibility for billing its calling card calls that appear before the card is terminated. Nothing in this Subsection 8.4.1 shall prohibit USWC from terminating calling card service to customers who have been determined to be a credit risk according to its normal business practices.

- 8.4.2 Except as provided above, USWC will coordinate the disconnection of customer's calling cards with AT&T to ensure that there is no time that a customer is without a calling card.
- 8.4.3 USWC shall not prohibit AT&T from issuing a new telephone calling card to an AT&T customer utilizing the same TLN and AT&T shall have the right to enter the TLN in the LIDB for calling card verification purposes.
- 8.4.4 USWC will provide AT&T the ability to utilize USWC's LIDB for calling card validation.
- 8.4.5 In order to determine exchange rates and for rates and billing purposes, USWC will provide AT&T access to the system file linking the address to the Central Office.
- 8.5 USWC shall make engineering support available to AT&T for all special services covered under a local resale offer on the same basis as it provides to itself or to its end users.

#### 9. Service Functions

#### 9.1 Electronic Interface

9.1.1 USWC shall provide a real-time electronic interface ("El") for transferring and receiving Service Orders and Provisioning data and materials (e.g., access to Street Address Guide ("SAG") and Telephone Number Assignment database). This interface shall be administered through a gateway that will serve as a single point of contact for the transmission of such data from AT&T to USWC, and from USWC to AT&T. The gateways that shall be considered include remote-host terminal access, EDI EC lite and EC. The requirements and implementation of such a data transfer system shall be negotiated in good faith by the parties and be specified in a written agreement between AT&T and USWC that will be completed expeditiously after the Effective Date of this Agreement. Until such time as a gateway is established, the EI to be used shall be of the same quality and timeliness as is currently used by USWC, as may be modified by agreement of the parties during the interim period.

#### 9.2 Number Assignment Administration

9.2.1 USWC will allow existing USWC customers to retain their phone number in the event such customers change local exchange carriers.

- 9.2.2 USWC will equally participate (e.g. 411 and 611 calls) with AT&T on N11 assignments. N11 assignment implementation may be facilitated through line class codes.
- 9.2.3 To the extent USWC remains the administrator, USWC will manage NPA/NXX splits in its region. Any splits and overlays will be considered an industry-wide issue and will be discussed before the appropriate state regulatory agency or commission.
- 9.2.4 USWC and AT&T will follow the industry standard decisions concerning number assignment.

#### 9.3 Lifeline/Link-Up Services

- 9.3.1 USWC shall offer for resale Lifeline and Link-Up Service but only for customers eligible to receive such Services. USWC will provide information about the certification process for the provisioning of Lifeline, Link-Up, and similar services. USWC will forward to AT&T, in electronic format, all information regarding a customer's program eligibility, status and certification when a USWC customer currently on any USWC telephone assistance program changes service to AT&T as their local exchange carrier.
- 9.3.2 USWC will cooperate in attaining any subsidy associated with a customer transfer to AT&T.

#### 9.4 Work Order Processes

- 9.4.1 USWC shall ensure that all work order processes used to provision Local Service to AT&T for resale meet the service parity requirements set forth in this Attachment 2 and elsewhere in this Agreement.
- 9.4.2 Not later than thirty (30) days after the Effective Date of this Agreement, USWC and AT&T shall develop mutually agreed-upon escalation and expedite procedures to be employed at any point in the Service Ordering, Provisioning, Maintenance, Billing and Customer Usage Data transfer processes to facilitate rapid and timely resolution of disputes.

#### 9.5 Point of Contact for the AT&T Customer

- 9.5.1 Except as otherwise provided in this Agreement, AT&T shall be the single and sole point of contact for all AT&T customers.
- 9.5.2 USWC shall refer all questions regarding any AT&T service or product directly to AT&T at a telephone number specified by AT&T.

9.5.3 USWC shall ensure that all USWC representatives receiving inquiries regarding AT&T services: (a) shall provide such accurate telephone numbers to callers who inquire about AT&T services or products; and (b) do not in any way disparage or discriminate against AT&T, or its products or services.

#### 9.6 Single Point of Contact

Each party shall provide the other party with a single point of contact ("SPOC") for all inquiries regarding the implementation of this Attachment 2. Each party shall accept all inquiries from the other party and provide timely responses.

#### 9.7 Service Order

- 9.7.1 To facilitate the ordering of new service for resale or changes to such service to an AT&T customer ("Service Order"), USWC shall provide AT&T's representative with real-time access (as described in Section 9.1 preceding) to USWC customer information and on all features and services to enable AT&T representative to perform the following tasks:
- 9.7.1.1 Obtain customer profile, including customer name, billing and residence address, billing telephone number(s), eligibility for Voluntary Federal Customer Financial Assistance Program, Telephone Relay, and other similar services, and identification of USWC features and services subscribed to by the customer;
- 9.7.1.2 Obtain information on all features and services available, including new services, trial offers and promotions, at all levels, including the individual SAG correlation;
  - 9.7.1.3 Enter AT&T customer order for all desired features and services;
  - 9.7.1.4 Assign a telephone number (if AT&T customer does not have one assigned);
  - 9.7.1.5 Establish the appropriate directory listing:
  - 9.7.1.6 Determine if a service call is needed to install the line or service;
  - 9.7.1.7 Schedule dispatch and installation, if applicable;
  - 9.7.1.8 Provide service availability dates to the customer.
- 9.7.1.9 Order local IntraLATA toll service and enter the AT&T customer's choice of primary interexchange carrier on a single, unified order;

- 9.7.1.10 Suspend, terminate or restore service to an AT&T customer;
- 9.7.1.11 Enable AT&T to correlate all available features and services between USWC's and AT&T's local switching office (LSO);
- 9.7.1.12 Allow updates of the 911 and E911 database information for AT&T customers with each new service order; and
- 9.7.1.13 Transfer a customer with no feature changes to AT&T through a streamlined PLOC (primary local carrier) transfer process.
- 9.7.2 USWC shall provide AT&T with written notification within ten (10) days after an AT&T customer disconnects from AT&T local service.
- 9.7.3 USWC shall provide AT&T with real time notification regarding whether a customer has a previous pending or held order.
- 9.7.4 USWC shall provide AT&T with a complete list of service order rejection scenarios and criteria. In addition, USWC shall provide AT&T with the criteria for when a service order can only be partially completed.
- 9.7.5 USWC shall provide customers (and potential customers) with the ability to access and order AT&T service through soft dial tone.
- 9.7.6 USWC shall provide AT&T and AT&T's customers with service assurance warranties and incentives in accordance with the provisions of Attachment 11 of this Agreement.

#### 9.8 Provisioning

9.8.1 After receipt and acceptance of a Service Order, USWC shall provision such Service Order in accordance with the Intervals and DMOQs set forth in Attachment 11 to this Agreement.

#### 9.8.2 Service Disconnects

- 9.8.2 After receipt and acceptance of a Service Order, USWC shall provision such Service Order in accordance with the Intervals and DMOQs set forth in Attachment 11 to this Agreement.
- 9.8.4 USWC shall provide AT&T with service status notices, within mutually agreed-upon intervals as set forth in Attachment 11 to this Agreement. Such status

notices shall include the following:

- 9.8.4.1 Firm order confirmation, including service availability date and information regarding the need for a service dispatch for installation;
- 9.8.4.2 Notice of service installation issued at time of installation, including any additional information, such as material charges;
  - 9.8.4.3 Rejections/errors in Service Orders;
  - 9.8.4.4 Jeopardies and missed appointments;
  - 9.8.4.5 Charges associated with necessary construction;
  - 9.8.4.6 Order status at critical intervals; and
  - 9.8.4.7 Test results.
- 9.8.5 Where USWC provides installation, USWC shall notify AT&T immediately, in accordance with the Intervals and DMOQs set forth in Attachment 11 to this Agreement, if an AT&T customer requests, at the time of installation, a change in the service and/or features differing from the original service order as given to USWC by AT&T.
- 9.8.6 USWC shall provide provisioning support to AT&T twenty-four (24) hours a day, seven (7) days a week, in accordance with the Intervals and DMOQs set forth in Attachment 11 to this Agreement.
- 9.8.7 USWC shall provide training for all USWC employees who may communicate, either by telephone or face-to-face, with AT&T customers during the provisioning process, in accordance with the DMOQs set forth in Attachment 11 to this Agreement. Such training shall conform to AT&T's specifications and shall comply with the branding requirements of this Agreement.
- 9.8.8 USWC shall agree to processes and procedures by which AT&T may conduct testing and turn up for AT&T customers. USWC shall permit AT&T to implement such processes and procedures for AT&T customers. Such processes and procedures shall be no more stringent that those employed by USWC for its own customers and shall be in accordance with the Intervals and DMOQs set forth in Attachment 11 to this Agreement.

#### 9.9 Maintenance

9,9.1 Maintenance shall be provided in accordance with the requirements and standards set forth in Attachment 6. Maintenance will be provided by USWC in accordance with the service parity requirements set forth in this Attachment 2 and elsewhere in this Agreement.

#### 9.10 Provision of Customer Usage Data

9.10.1 USWC shall provide the Customer Usage Data recorded by USWC. Such data shall include complete AT&T Customer Usage Data for Local Service, including both local and intraLATA toll service (e.g., call detail for all services, including usage-sensitive features), in accordance with the terms and conditions set forth in Attachment 8.

#### 9.11 Service/Operation Readiness Testing

9.11.1 In addition to testing described elsewhere in this Section, USWC shall test the systems used to perform the following functions in accordance with the methodology and time frames agreed to by the Parties:

All interfaces between AT&T and USWC work centers for Service Order, Provisioning;

Maintenance, Billing and Customer Usage Data:

The process for USWC to provide customer profiles:

The installation scheduling process:

Network alarm reporting;

Telephone number assignment:

Procedures for communications and coordination between AT&T SPOC and USWC SPOC;

Procedures for transmission of Customer Usage Data; and

Procedures for transmitting bills to AT&T for Local Service.

9.11.2 The functionalities identified above shall be tested in order to determine whether USWC performance meets the applicable service parity requirements, DMOQs and other performance standards set forth herein. USWC shall make available sufficient technical staff to perform such testing. USWC technical staff shall be available to meet

with AT&T as necessary to facilitate testing. USWC and AT&T shall mutually agree on the schedule for such testing.

- 9.11.3 At AT&T's request, USWC shall provide to AT&T any results of the testing performed pursuant to the terms of this Section 9.11. AT&T may review such results and may notify USWC of any failures to meet the requirements of this Agreement.
- 9.11.4 During the term of this Agreement, USWC shall participate in all reasonable cooperative testing requested by AT&T whenever it is deemed necessary by AT&T to ensure service performance, reliability and customer serviceability.

#### 9.12 Obsolete/Grandparented Services

9.12.1 USWC shall offer for resale to AT&T all obsolete/grandparented services. For purposes of this Agreement, an obsolete/grandparented service is a service USWC offers to existing retail subscribers, but not to new subscribers. AT&T shall have the right to review any USWC request for termination of service and/or its grandparenting filed with the Commission.

#### 9.13 N11 Service

- 9.13.1 USWC agrees not to offer any new N11 services after the Effective Date of this Agreement unless USWC makes any such service available for resale.
- 9.13.2 AT&T shall have the right to resell any N11 service, including, but not limited to, 411, 611 or 911 services, existing as of the Effective Date, subject to exhaust and procedural limitations to be determined by the parties. These services shall be unbranded and routed to AT&T, as required by AT&T pursuant to this Agreement.

#### 9.14 Contract Service Arrangements, Special Arrangements, and Promotions

9.14.1 USWC shall offer for resale all of its services available to any retail customer, including, but not limited to, contract service arrangements, special arrangements, and promotions, if consistent with decisions of the Commission and FCC Rules and Regulations.

#### 9.15 Discount Plans and Services

9.15.1 USWC shall offer for resale all Discount Plans and Services in accordance with FCC Rules and Regulations.

#### 9.16 Hospitality Service

9.16.1 USWC shall provide all blocking, screening, and all other applicable functions available for hospitality lines utilized as such.

#### 9.17 Additional Service Functions

9.17.1 USWC shall provide AT&T with the information AT&T will need to certify subscribers as exempt from charges (including taxes), or eligible for reduced charges associated with providing services and shall not charge AT&T for such information.

#### 10. Security and Law

- 10.1 USWC will maintain and safeguard all AT&T customer information according to CPNI privacy guidelines.
- 10.2 USWC and AT&T will work jointly in security matters as they relate to AT&T's customers in a resale environment including, but not limited to, harassment and annoyance calls.
- 10.3 USWC and AT&T will work jointly to support law enforcement agency requirements including, but not limited to, taps, traces, and court orders.
- 10.4 USWC will work jointly with AT&T with respect to prevention and settlement of fraud.
- 10.5 USWC and AT&T will work jointly to provide access to lines in a hostage situation.

#### 11. Billing For Local Service

11.1 Subject to final pricing decisions, USWC shall bill AT&T for Local Service provided by USWC to AT&T pursuant to the terms of this Section 11 and in accordance with the terms and conditions for Connectivity Billing and Recording in Attachment 7. USWC shall recognize AT&T as the customer of record for all Local Service and will send all notices, bills and other pertinent information directly to AT&T unless AT&T specifically requests otherwise.

#### **APPENDIX A**

#### **RESALE SERVICES**

## Retail Telecommunications Services Available at the Avoided Cost Discount

800 Pageline Service

800 Service

800 ServiceLine Service

800 Termination on CENTRON I

Adjacent Exchange Service

Alternate listings

Answer Supervision - Line Side

**ATM Cell Relay Service** 

Auto intercept

**Billed Number Screening** 

Busy Line/Interrupt Service

Call forwarding services - Busy line (in firm, intra office or interoffice)

Call forwarding services - Don't answer (intra office or interoffice)

Call forwarding services - Busy line (programmable)

Call forwarding services - Don't answer (programmable)

Call rejection

Call trace

Call transfer

Call Waiting

Call Waiting Deluxe

Caller ID - Name & Number

Caller ID - Name

CCMS/CENTRON I

Command-a-link

Complete-a-call

Connections of Terminal Equipment & Communications Systems

Connections of Premises Equipment to Exchange Services

Contingency Plan Service

Continuous Redial

Custom Calling

**Custom Ringing** 

**Custom Solutions** 

Customized numbers

CustomNet

DID 2-way Call Transfer

**DID 2-way Trunk Circuit Terminations** 

DID CO terminations for 2-way 4-wire trunk

**DID Expanded Answer** 

DID for 2-way 4-wire trunk

**DID Expanded Answer** 

DID for 2-way 4-wire PBX trunk

DID service - for in-only PBX trunks

**DID Trunk Queuing** 

Digital Switched Service

Direct customer access

Directed call pickup

Directed call pickup with barge-in

**Directory Listings** 

Cross reference, regular and temporary listings

Foreign exchange listings

Semi-private directory service

Distinctive alert

Foreign exchange service - 4 wire termination arrangement

Frame Relay Service

Hotel PBX message rate w/ & w/o guest dialing

Hot line

Intercept Service

Intracall

ISDN (Single line & primary rate)

Joint User Service

Last call return

Local service - Business

One party local telephone service (priced flat rate or measured)

Two party local telephone service (priced flat rate or message rate)

PBX trunks (flat rate or message rate)

Market expansion line

Message Delivery Service

Message Telecommunications Service (IntraLATA toll)

Message Waiting Indication - Audible and Visual

Night, Sundays and Holiday Service Listing

Power Failure Transfer

Priority call

Private Directory Service

Private switch - automatic location identification

#### Attachment 2

Remote access forwarding Resale of CENTRON Service Listing Scheduled call forwarding Select Call Routing Service Selective call forwarding Selective Carrier Denial Single Number Service Special Reverse Charge Toll Service Speed Call 8 Speed Call 30 Stand-By Line Service SwitchNet 56 Service - digital Three way calling Toll Diversion Touch Tone Transparent LAN Service US West Complete-A-Call Service Versanet alarm access line Warm line **WATS** 

# Retail Telecommunications Services Also Available at the Avoided Cost Discount But Limited to the same class of customers eligible to purchase the service from USWC

Residence Basic Exchange

One party local telephone service (priced flat rate or measured)

PBX trunks (flat rate or message rate)

Combined main line service

Classroom service

CENTRON (pending outcome of Docket P421/EM-96-471)

**Optional Calling Plans** 

Volume Discount Plans

**ICB Negotiated Contracts** 

Discounted Feature Packages

## Grandparented Retail Services Available for Resale at Avoided Cost Discounted Rates But Limited To Existing Retail Customers of the Service

These services have been grandparented and are no longer generally available to retail customers. See, 47 C.F.R. § 51.615; FCC Order at ¶968.

#### **Exchange and Network Services Price List**

**Apartment Door Answering Service** Automatic Call Distributor Service **Automatic Identified Outward Dialing** Call Management Systems Caroline Service **CENTREX Service Dial Switching Systems** Extension and Private Branch Exchange Station Lines Group Use Exchange Service Hotel Branch Exchange Service Message Rate Trunks Mileage Charges Miscellaneous Switching Arrangements **Obsolete Central Office Services** Obsolete Telephone Answering Bureau Service Private Branch Exchange (PBX) Service Special Needs Customer Premises Equipment **Specialized Customer Premises Equipment** SWITCHNET 56 Service-analog Telephone Answering Service Bureau Service Two Party Telephone Service

#### Private Line Transport Services Price List/Tariff

Alarm Services
Automatic Type Ringing
Connecting Equipment
DATAPHONE Select-A Station Service
DC Channel
Direct Routed Channels
Foreign Exchange Service
High Voltage Environment Protection Arrangement

Information Distribution Service Special Routing of Channels Switching Arrangement

#### **Advanced Communications Services Price List**

Switched Multi-Megabit Data Service

### Wholesale Services Available For Resale At Current Tariffed Rates

These services are sold to other telecommunications companies rather than retail customers. See 47 U.S.C. § 251(c)(4)(A); FCC Order at ¶¶872, 873, 874, and 875.

**Switched Access Service** 

All

Special Access/Private Line Transport Services

All

**Exchange and Network Services Tariff** 

Directory Assistance Service (intraLATA toll and local)
Operator Assisted Directory Assistance
Local person-to-person operator service
Local station-to-station operator service
Public Access Line (PAL) Service (See FCC Order ¶876)

#### Non-Tariffed and Deregulated Services

There are telecommunications services, and therefore are available for resale at the avoided cost discount.

#### \*Deregulated

Conferencing Service
CPE
Enhanced Fax
Inside Wiring
Linebacker/Linebacker Plus

Protocol Conversion UNISTAR Versanet Voice Messaging

\*This list is not intended to be exclusive of other non-tariffed services which might also fit within this category of services which shall be available for resale at the avoided cost discount.

#### SERVICE DESCRIPTION: UNBUNDLED NETWORK ELEMENTS

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#### SERVICE DESCRIPTION: UNBUNDLED NETWORK ELEMENTS

#### 1. Introduction

- 1.1 This Attachment sets forth the descriptions and requirements for unbundled network elements that USWC agrees to offer to AT&T under this Agreement.
- 1.2 Unless otherwise requested by AT&T, each Network Element and the connections between Network Elements provided by USWC to AT&T shall be made available to AT&T on a priority basis, at any technically feasible point, that is equal to or better than the priorities that USWC provides to itself, USWC's own subscribers, to a USWC Affiliate or to any other entity.

#### 2. Loop

#### 2.1 Definition:

A "Loop" is a transmission facility between the main distribution frame (cross-connect), or its equivalent, in a USWC central office or wire center and the network interface device at a customer's premises, to which AT&T is granted exclusive use. This includes, but is not limited to, two-wire and four-wire copper analog voice-grade loops, two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL and DS1-level signals, as well as DS-1 loops, Coax loops and Fiber loops to the extent such facilities exist or are or will be installed within the state. AT&T may order a copper twisted pair Loop even in instances where the Loop for services that USWC offers is other than a copper facility. A loop is composed of the Network Interface Device (NID) and the following SubLoop Elements, to the extent that each is physically existent in the LEC network where the Loop is ordered: Loop Distribution, Loop Concentrator/Multiplexer and Loop Feeder. The SubLoop Elements are defined in detail below.

#### 2.1.1 Loop Type Definitions

- (a) 2-wire Copper Loop Copper twisted pair medium.
- (b) Special Copper Loop Copper twisted pair medium, unfettered by any intervening equipment (e.g., filters, load coils, range extenders) and which

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does not contain any bridged taps, so that AT&T can use these loops for a variety of services by attaching appropriate terminal equipment at the ends.

- (c) 4-wire Copper Loop Copper twisted pair medium, consisting of two pairs or four wires.
- (d) DS1 Loop A Channel for transporting a DS1 level signal over metallic T1 or fiber facilities.
- (e) Coax Loop Coaxial cable (coax) Loop is capable of transmitting signals for the following services:
  - (i) Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mbps and 45 Mbps
  - (ii) Analog Radio Frequency based services (e.g., CATV)
- (f) Fiber Loop Fiber optic cable Loop is capable of transmitting signals for the following services:
  - (i) DS3 rate private line service
  - (ii) Optical SONET OCn rate private lines
  - (iii) Analog Radio Frequency based services (e.g., CATV)

#### 2.1.2 Technical Requirements for Loops

Loops are capable of transmitting signals for the following services (as needed by AT&T to provide end-to-end service capability to its end-user customer):

- (a) 2-wire voice grade basic telephone services
- (b) 2-wire ISDN
- (c) 2-wire Centrex
- (d) 2 and 4-wire PBX lines or trunks
- (e) 2 and 4-wire voice grade private lines and foreign exchange lines

- (f) 4-wire digital data (2.4Kbps through 64Kbps and n times 64Kbps (where n< 24))
- (g) 4-wire DS1 (switched or private line)
- 2.1.3 Available Types and Grades
  - (a) 2-wire VG Loop
  - (b) 2-wire ISDN Loop
  - (c) Special Copper Loop
  - (d) 4-wire Loop
  - (e) DS1 Loop
  - (f) COAX Loop
  - (g) Fiber Loop
- 2.2 Additional Requirements for Loop Where Integrated Digital Loop Carrier Systems
  Are Being Used

If USWC uses Integrated Digital Loop Carrier (DLCs) systems to provide the local loop, USWC will make alternate arrangements to permit AT&T to order a contiguous unbundled local loop at no additional cost to AT&T. These arrangements may, at AT&T's option, include the following: provide AT&T with copper facilities or universal DLC that are acceptable to AT&T, deploy Virtual Remote Terminals, allow AT&T to purchase the entire Integrated DLC, or convert integrated DLCs to non-integrated systems.

- 3. Distribution
- 3.1 Definition:
- 3.1.1 Distribution provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of a Feeder Distribution Interface (FDI). The FDI is a device that terminates the Distribution Media and the Loop

Feeder, and cross-connects them in order to provide a continuous transmission path between the NID and a telephone company central office. There are three basic types of feeder-distribution connection: (a) multiple (splicing of multiple distribution pairs onto one feeder pair); (b) dedicated ("home run"); and (c) interfaced ("cross-connected"). While older plant uses multiple and dedicated approaches, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced approach. The feeder-distribution interface (FDI) in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

- 3.1.2 The Distribution may be copper twisted pair, coax cable, single or multi-mode fiber optic cable or other technologies. A combination that includes two or more of these media is also possible. In certain cases, AT&T shall require a copper twisted pair Distribution even in instances where the Distribution for services that USWC offers is other than a copper facility.
- 3.2 Requirements for All Distribution
- 3.2.1 Distribution shall be capable of transmitting signals for the following services (as requested by AT&T):
  - 3.2.1.1 Two-wire and four-wire analog voice grade loops; and
  - 3.2.1.2 Two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL and DS1-level signals.
- 3.2.2 Distribution shall transmit all signaling messages or tones. Where the Distribution includes any active elements that terminate any of the signaling messages or tones, these messages or tones shall be reproduced by the Distribution at the interfaces to an adjacent Network Element in a format that maintains the integrity of the signaling messages or tones.
- 3.2.3 Distribution shall support functions associated with provisioning, maintenance and testing of the Distribution itself, as well as provide necessary access to provisioning, maintenance and testing functions for Network Elements to which it is associated.
- 3.2.4 Where possible, Distribution shall provide performance monitoring of the Distribution itself, as well as provide necessary access to performance monitoring for Network Elements to which it is associated.

- 3.2.5 Distribution shall be equal to or better than all of the applicable requirements set forth in the following technical references:
  - 3.2.5.1 Bellcore TR-TSY-000057, "Functional Criteria for Digital Loop Carrier Systems".
  - 3.2.5.2 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines."
- 3.2.6 USWC shall provide AT&T's facilities with physical access for connection to the FDI.
- 3.2.7 USWC shall offer Distribution together with, and separately from, the NID component of Loop Distribution.
- 3.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements in Section 3.2. (above), AT&T may designate Distribution to be copper twisted pair which are unfettered by any intervening equipment (e.g., filters, load coils, range extenders) so that AT&T can use these loops for a variety of services by attaching appropriate terminal equipment at the ends.

3.4 Additional Requirements for Fiber Distribution

Fiber optic cable Distribution shall be capable of transmitting signals for the following services in addition to the ones under Section 3.2.1 above:

- 3.4.1 DS3 rate private line service;
- 3.4.2 Optical SONET OCn rate private lines (where n is defined in the technical reference in Section 4.2.4.4); and
- 3.4.3 Analog Radio Frequency based services (e.g., CATV).
- 3.5 Additional Requirements for Coaxial Cable Distribution

Coaxial Cable (coax) Distribution shall be capable of transmitting signals for the following services in addition to the ones under Section 3.2.1 above:

3.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric.

#### at rates between 1.5 Mb/s and 45 Mb/s; and

- 3.5.2 Analog Radio Frequency based services (e.g., CATV).
- 3.6 Interface Requirements
- 3.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the performance requirements set forth in Section 14.2 of this Attachment 3.
- 3.6.2 Distribution shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:
  - 3.6.2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices," Issued December 1,1994.
  - 3.6.2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems," Issued January 2, 1993.
  - 3.6.2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines".
  - 3.6.2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991.
- 3.7 Any functions necessary within the FDI shall be performed by USWC technicians or USWC approved contractors or subcontractors.
- 4. Loop Concentrator/Multiplexer
- 4.1 Definition:
- 4.1.1 The Loop Concentrator/Multiplexer: (a) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (b) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing); (c) aggregates a specified number of signals or channels to fewer channels (concentrating); (d) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (e) in some instances performs electrical to optical (E/O) conversion.

- 4.1.2 The Loop Concentrator/Multiplexer function may be provided through a Digital Loop Carrier (DLC) system, channel bank, multiplexer or other equipment at which traffic is encoded and decoded, multiplexed and demultiplexed, or concentrated.
- 4.2 Technical Requirements
- 4.2.1 The Loop Concentrator/Multiplexer shall be capable of performing its functions on the signals for, but not limited to, the following services (as needed by AT&T to provide end-to-end service capability to its customer):
- 4.2.1.1 2-wire voice grade basic telephone services;
- 4.2.1.2 2-wire ISDN;
- 4.2.1.3 2-wire Centrex;
- 4.2.1.4 2 and 4-wire PBX lines or trunks:
- 4.2.1.5 2 and 4-wire voice grade private lines and foreign exchange lines;
- 4.2.1.6 4-wire digital data (2.4Kbps through 64Kbps and n times 64Kbps (where n 24);
- 4.2.1.7 4-wire DS1 (switched or private line);
- 4.2.1.8 DS-3 rate private lines;
- 4.2.1.9 Optical SONET rate private lines; and
- 4.2.1.10 Coin services
- 4.2.2 The Loop Concentrator/Multiplexer shall perform the following functions as appropriate:
  - 4.2.2.1 Analog to digital signal conversion of both incoming and outgoing (upstream and downstream) analog signals;
  - 4.2.2.2 Multiplexing of the individual digital signals up to higher transmission bit rate signals (e.g., DSO, DS1, DS3, or optical SONET rates) for transport to the USWC central office through the Loop Feeder; and

- 4.2.2.3 Concentration of end-user customer signals onto fewer channels of a Loop Feeder (the concentration ratio provided for the Network Elements requested by AT&T shall be no higher than the Loop Concentrator/Multiplexer concentration ratio USWC uses to provide service to its own customers.).
- 4.2.3 USWC shall provide power for the Loop Concentrator/Multiplexer through a non-interruptible source if the function is performed in a central office, or from a commercial AC power source with battery backup if the equipment is located outside a central office. Such power shall also adhere to the requirements stated in Section 2 of Attachment 4.
- 4.2.4 The Loop Concentrator/Multiplexer shall be provided to AT&T in accordance with the following Technical References:
  - 4.2.4.1 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993.
  - 4.2.4.2 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
  - 4.2.4.3 ANSI T1.106 1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode).
  - 4.2.4.4 ANSI T1.105 1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats.
  - 4.2.4.5 ANSI T1.102 1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces.
  - 4.2.4.6 ANSI T1.403- 1989, American National Standard for Telecommunications Carrier to Customer Installation, DS1 Metallic Interface Specification.
  - 4.2.4.7 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.
  - 4.2.4.8 AT&T Data Communications Technical Reference TR 62310, DS0 Digital Local Channel Description and Interface Specification, August

1993: /	Also Add	endum '	1 and	Addendum	2

- 4.2.4.9 AT&T Technical Reference TR 62411, ACCUNET T1.5 Service Description and Interface Specification, December 1990; Addendum 1, March 1991; Addendum 2, October 1992.
- 4.2.4.10 AT&T Technical Reference TR 62421, ACCUNET Spectrum of Digital Services Description and Interface Specification, December 1989; Also TR 62421A Addendum 2, November 1992.
- 4.2.4.11 AT&T Technical Reference TR 54014, ACCUNET T45 Reserved Services Service Description and Interface Specification.
- 4.2.4.12 AT&T Technical Reference TR 54018, ACCUNET T155 Service Description and Interface Specification.
- 4.2.4.13 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987.
- 4.2.4.14 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev.1, December 1993; Supplement 1, December 1993.
- 4.2.4.15 Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System, (LSSGR) FSD 20-02-2100, Issue 1, September 1989.
- 4.2.4.16 AT&T Technical Reference TR 62411, ACCUNET T1.5 Service Description and Interface Specification, December 1990; Addendum 1, March 1991; Addendum 2, October 1992.
- 4.2.4.17 AT&T Technical Reference TR 62421, ACCUNET Spectrum of Digital Services Description and Interface Specification, December 1989; Also TR 62421A Addendum 2, November 1992.
- 4.2.4.18 AT&T Technical Reference TR 54014, ACCUNET T45 Reserved Services Service Description and Interface Specification.
- 4.2.4.19 AT&T Technical Reference TR 54018, ACCUNET T155 Service Description and Interface Specification.

- 4.3 Requirements for an Intelligent Loop Concentrator/Multiplexer
- 4.3.1 In addition to the basic functions described above for the Loop Concentrator/Multiplexer, the Intelligent Loop Concentrator/Multiplexer (IC/M) shall provide facility grooming, facility test functions, format conversion, signaling conversion and dynamic time slot assignment (TSI) as appropriate.
- 4.3.2 At AT&T's option, USWC shall provide immediate and continuous configuration and reconfiguration of the channels within the physical interfaces (i.e., of cross connects, as well as direct AT&T control of such configurations and reconfigurations) on the underlying device that provides such IC/M function.
- 4.3.3 At AT&T's option, USWC shall provide scheduled configuration and reconfiguration of the channels within the physical interfaces (i.e., of cross connects, as well as direct AT&T control of such configurations and reconfigurations) on the underlying device that provides such IC/M function.
- 4.3.4 The underlying equipment that provides such IC/M function shall continuously monitor protected circuit packs and redundant common equipment.
- 4.3.5 The underlying equipment that provides such IC/M function shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 4.3.6 The underlying equipment that provides such IC/M function shall be equipped with a redundant power supply or a battery back-up.
- 4.3.7 At AT&T's option, USWC shall provide AT&T with real time performance monitoring and alarm data on IC/M elements that may affect AT&T's traffic. This includes IC/M hardware alarm data and facility alarm data on the underlying device that provides such IC/M function.
- 4.3.8 At AT&T's option, USWC shall provide AT&T with real time ability to initiate tests on the underlying device that provides such IC/M function integrated test equipment as well as other integrated functionality for routine testing and fault isolation.
- 4.3.9 The IC/M shall be capable of performing signaling conversion and data conditioning in compliance with AT&T Technical Reference TR 62421 ACCUNET® Spectrum of Digital Services, December 1989 and AT&T Technical Reference TR 62310 DS0 Digital Local Channel Description and Interface Specification, August 1993, including current addendums.

### 4.4 Interface Requirements

The Loop Concentrator/Multiplexer shall meet the following interface requirements, as appropriate for the configuration that AT&T designates:

- 4.4.1 The Loop Concentrator/Multiplexer shall provide an analog voice frequency copper twisted pair interface to the local switch (e.g., universal DLC applications), as described in the references in Section 4.2.4.
- 4.4.2 The Loop Concentrator/Multiplexer shall provide digital 4-wire electrical interfaces to the local digital switch, as described in the references in Section 4.2.4.
- 4.4.3 The Loop Concentrator/Multiplexer shall provide optical SONET interfaces at rates of OC-1, OC-3, OC-12 and OC-48#, with # as described in the references in Section 4.2.4.
- 4.4.4 The Loop Concentrator/Multiplexer shall provide the Bellcore TR-303 DS1 level interface to a Local Digital switch. The Loop Concentrator/Multiplexer shall provide Bellcore TR-08 modes 1&2 DS1 interfaces when designated by AT&T. Such interface requirements are specified in the references in Section 4.2.4.
- 4.4.5 The Loop Concentrator/Multiplexer shall provide Integrated Network Access (INA) DS1s for non-locally switched or non-switched special services, as described in the references in Section 4.2.4.
- 4.5 The Intelligent Loop Concentrator/Multiplexer shall be provided to AT&T in accordance with the Technical References set forth in Sections 4.2.4.13 through 4.2.4.19 above.

#### 5. Loop Feeder

#### 5.1 **Definition:**

5.1.1 The Loop Feeder provides connectivity between: (a) a FDI associated with Loop Distribution and a termination point appropriate for the media in a central office; or (b) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office. USWC shall provide AT&T physical access to the FDI, and the right to connect, the Loop Feeder to the FDI.

- 5.1.2 The physical medium of the Loop Feeder may be copper twisted pair, or single or multi-mode fiber as designated by AT&T. In certain cases, AT&T will require a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that USWC offers is other than a copper facility.
- 5.2 Requirements for All Loop Feeder Media
- 5.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data or analog radio frequency signals.
- 5.2.2 USWC shall provide appropriate power for all active elements in the Loop Feeder. USWC will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant Remote Terminal (RT).
- 5.3 Additional Requirements for Special Copper Loop Feeder Medium

In addition to requirements set forth in Section 5.2 (above), AT&T may require USWC to provide copper twisted pair Loop Feeder which are unfettered by any intervening equipment (e.g. filters, load coils and range extenders), so that AT&T can use these Loop Feeders for a variety of services by attaching appropriate terminal equipment at the ends.

5.4 Additional Technical Requirements for DS1 Conditioned Loop Feeder

In addition to the requirements set forth in Section 5.2 above, AT&T may designate that the Loop Feeder be conditioned to transport a DS1 signal. The requirements for such transport are defined in the references below in Section 5.6.

5.5 Additional Technical Requirements for Optical Loop Feeder

In addition to the requirements set forth in Section 5.2 above, AT&T may designate that Loop Feeder will transport DS3 and OCn (where n is defined in the technical reference in Section 4.2.4.4). The requirements for such transport are defined in the references below in Section 5.6.

- 5.6 USWC shall offer Loop Feeder in accordance with the requirements set forth in the following Technical References:
  - 5.6.1 AT&T Technical Reference TR-62415 "Access Specifications for High

- Capacity DS1/DS3 Dedicated Digital Service".
- 5.6.2 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS1 interfaces.
- 5.6.3 AT&T Data Communications Technical Reference TR 62310, DS0 Digital Local Channel Description and Interface Specification, August 1993; Also Addendum 1 and Addendum 2.
- 5.6.4 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993.
- 5.6.5 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 5.6.6 ANSI T1.106 1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode).
- 5.6.7 ANSI T1.105 1995, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.
- 5.6.8 ANSI T1.102 1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces.
- 5.6.9 ANSI T1.403–1989, American National Standard for Telecommunications Carrier to Customer Installation, DS1 Metallic Interface Specification.
- 5.6.10 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.
- 5.6.11 AT&T Technical Reference TR 62411, ACCUNET T1.5 Service Description and Interface Specification, December 1990; Addendum 1, March 1991; Addendum 2, October 1992.
- 5.6.12 AT&T Technical Reference TR 62421, ACCUNET Spectrum of Digital Services Description and Interface Specification, December 1989; Also TR 62421A Addendum 2, November 1992.
- 5.6.13 AT&T Technical Reference TR 54014, ACCUNET T45 Reserved Services -Service Description and Interface Specification.

5.6.14 AT&T Technical Reference TR 54018, ACCUNET T155 Service Description and Interface Specification.

### 5.7 Interface Requirements

5.7.1 The Loop Feeder point of termination (POT) within a USWC central office will be as follows:

Copper twisted pairs shall terminate on the MDF;

DS1 Loop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and

Fiber Optic cable shall terminate on a LGX.

### 5.7.2 When requested by AT&T:

The Loop Feeder shall provide the analog voice frequency copper twisted pair interface for switched or private line services as defined in the references in Section 5.6.7.

- 5.7.2.1 The Loop Feeder shall provide the ISDN basic rate interface, as defined in the references in Section 5.6.7, to the local digital switch designated by AT&T.
- 5.7.2.2 The Loop Feeder shall provide digital 4-wire electrical interfaces for digital data services as defined in the references in Section 5.6.7.
- 5.7.2.3 The Loop Feeder shall provide the standard electrical DS1 interface for applications utilizing DS1 feeder as defined in the references in Section 5.6.7.
- 5.7.2.4 The Loop Feeder shall provide optical SONET interfaces at one or more of the following rates, OC-1, OC-3, OC-12 or OC-48, as defined in the references in Section 5.6.7.
- 5.7.3 Loop Feeder shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:
  - 5.7.3.1 Bellcore TR-TSY-00008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987.

- 5.7.3.2 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev.1, December 1993; Supplement 1, December 1993.
- 5.7.3.3 AT&T Technical Reference TR 62411, ACCUNET T1.5 Service Description and Interface Specification, December 1990; Addendum 1, March 1991; Addendum 2, October 1992.
- 5.7.3.4 AT&T Technical Reference TR 62421, ACCUNET Spectrum of Digital Services Description and Interface Specification, December 1989; Also TR 62421A Addendum 2, November 1992.
- 5.7.3.5 AT&T Technical Reference TR 54014, ACCUNET T45 Reserved Services Service Description and Interface Specification.
- 5.7.3.6 AT&T Technical Reference TR 54018, ACCUNET T155 Service Description and Interface Specification.

#### 5.7.4 Network Interface Device

#### 5.7.4.1 Definition

- 5.7.4.1.1 The Network Interface Device (NID) is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit. The function of the NID is to establish the network demarcation point between a carrier and its subscriber. The NID features two independent chambers or divisions which separate the service provider's network from the subscriber's inside wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider and the subscriber each make their connections. The NID provides a protective ground connection, provides protection against lightning and other high voltage surges, and is capable of terminating cables such as twisted pair cable.
- 5.7.4.1.2 AT&T may connect its NID to USWC's NID where there is available capacity, and where over voltage protection and adequate grounding can be accomplished.
- 5.7.4.1.3 With respect to multiple-line termination devices, AT&T shall specify the quantity of NIDs it requires within such device.
- 5.7.4.1.4 Figure 1 shows a schematic of a NID.

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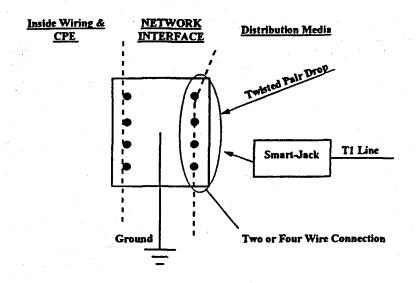


Figure 1 - Network Interface Device

- 5.7.4.2 Technical Requirements
- 5.7.4.2.1 The Network Interface Device shall provide a clean, accessible point of connection for the inside wiring and for the Distribution Media and/or cross connect to AT&T's NID and shall maintain a connection to ground that meets the requirements set forth below.
- 5.7.4.2.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to AT&T's NID.
- 5.7.4.2.3 All NID posts or connecting points shall be in place, secure, usable and free of any rust or corrosion. The protective ground connection shall exist and be properly installed. The ground wire shall be free of rust or corrosion and have continuity relative to ground.
- 5.7.4.2.4 The NID shall be capable of withstanding all normal local environmental variations.

- 5.7.4.2.5 Where the NID is not located in a larger, secure cabinet or closet, the NID shall be protected from physical vandalism. The NID shall be physically accessible to AT&T designated personnel. In cases where entrance to the subscriber premises is required to give access to the NID, AT&T shall obtain entrance permission directly from the subscriber.
- 5.7.4.2.6 USWC shall offer the NID together with, and separately from, the Distribution Media component of Loop Distribution.
- 5.7.4.3 Interface Requirements
- 5.7.4.3.1 The NID shall be the interface to subscribers' premises wiring for all loop technologies.
- 5.7.4.3.2 The NID shall be equal to or better than all of the industry standards for NIDs set forth in the following technical references:
  - 5.7.4.3.2.1 Bellcore Technical Advisory TA-TSY-000120, Subscriber Premises or Network Ground Wire.
  - 5.7.4.3.2.2 Bellcore Generic Requirement GR-49-CORE, Generic Requirements for Outdoor Telephone Network Interface Devices.
  - 5.7.4.3.2.3 Belicore Technical Requirement TR-NWT-00239, Indoor Telephone Network Interfaces.
  - 5.7.4.3.2.4 Bellcore Technical Requirement TR-NWT-000937, Generic Requirements for Outdoor and Indoor Building Entrance.
  - 5.7.4.3.2.5 Bellcore Technical Requirement TR-NWT-0001 33, Generic Requirements for Network Inside Wiring.
- 6. Local Switching
- 6.1 **Definition**
- 6.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate originating lines or trunks wired to the Main Distributing Frame (MDF) or Digital Cross Connect (DSX) panel to a desired terminating line or

trunk. The desired connection path for each call type will vary by customer and will be specified by AT&T as a routing scenario that will be implemented in advance as part of, or after, the purchase of unbundled local switching. Such functionality shall include all of the features, functions and capabilities that the underlying USWC switch providing such Local Switching function is then capable of providing. including but not limited to: line signaling and signaling software, digit reception, dialed number translations, call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, announcements, calling features and capabilities (including call processing), Centrex, Automatic Call Distributor (ACD), Carrier pre-subscription (e.g. long distance carrier, intraLATA toll), Carrier Identification Code (CIC) portability capabilities, testing and other operational features inherent to the switch and switch software. Local Switching also provides access to transport, signaling (ISDN User Part (ISUP)) and Transaction Capabilities Application Part (TCAP), and platforms such as adjuncts, Public Safety Systems (911), operator services, directory services and Advanced Intelligent Network (AIN). Remote Switching Module functionality is included in the Local Switching function. The switching capabilities used will be based on the line side features they support. Local Switching will also be capable of routing local, intraLATA, interLATA calls, as well as calls to international customers' preferred carriers; call features (e.g., call forwarding); and Centrex capabilities.

- 6.2 The requirements set forth in this Section 6.2 apply to Local Switching.
- 6.2.1 Technical Requirements
- 6.2.1.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in Bellcore's Local Switching Systems General Requirements (FR-NWT-000064).
- 6.2.1.2 When applicable, USWC shall route calls to the appropriate trunk or lines for call origination or termination.
- 6.2.1.3 The USWC local switch shall maintain translations necessary to direct AIN queries for select lines and dialing sequences.
- 6.2.1.4 The USWC local switch shall accept AIN responses on behalf of AT&T from the USWC SCP via SS7 network interconnection, then continue call handling according to instructions contained in the response.
- 6.2.1.5 USWC shall route calls on a per line or per screening class basis to platforms designated by AT&T (including but not limited to OS/DA and 611

maintenance calls).

- 6.2.1.6 USWC shall provide recorded announcements as designated by AT&T and call progress tones to alert callers of call progress and disposition.
- 6.2.1.7 USWC shall activate service for an AT&T Customer or network interconnection on any of the Local Switching interfaces. This includes provisioning changes to change a customer from USWC's services to AT&T's services without loss of feature functionality, unless specifically requested by AT&T.
- 6.2.1.8 USWC shall perform routine testing (e.g., Mechanized Loop Tests (MLT) and test calls such as 105, 107 and 108 type calls) and fault isolation on a schedule designated by AT&T.
- 6.2.1.9 USWC shall repair and restore any equipment or any other maintainable component that may adversely impact Local Switching.
- 6.2.1.10 USWC shall control congestion points, such as those caused by radio station call-ins, and network routing abnormalities using capabilities such as Automatic Call Gapping, Automatic Congestion Control and Network Routing Overflow.
- 6.2.1.11 USWC shall perform manual call trace as designated by AT&T and permit customer originated call trace.
- 6.2.1.12 USWC shall record all events that entail the use of Local Switching and send the appropriate recording data to AT&T as outlined in Attachment 8.
- 6.2.1.13 USWC shall provide at least each of the following special services on a nondiscriminatory basis that is at least equal to that which USWC is providing to its end-users or to its affiliates:
  - (a) Essential Service Lines:
  - (b) Telephone Service Prioritization:
  - (c) Related services for handicapped;
  - (d) Soft dial tone where required by law; and

- (e) Any other service required by law.
- 6.2.1.14 USWC shall provide Switching Service Point (SSP) capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch (STPs). In the event that Local Switching is provided out of a switch without SS7 capability, the Tandem shall provide this capability as discussed in the section on Tandem Switching. These capabilities shall adhere to Bellcore specifications TCAP (GR-1432-CORE), ISUP(GR-905-CORE), Call Management (GR-1429-CORE), Switched Fractional DS1 (GR-1357-CORE), Toll Free Service (GR-1428-CORE), Calling Name (GR-1597-CORE), Line Information Database (GR-954-CORE), and Advanced Intelligent Network (GR-2863-CORE).
- 6.2.1.15 USWC shall provide interfaces to adjuncts through industry standard and Bellcore interfaces. These adjuncts can include, but are not limited to, the Service Circuit Node and Automatic Call Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.
- 6.2.1.16 USWC shall provide performance data regarding a customer line, traffic characteristics or other measurable elements to AT&T upon AT&T's request.
- 6.2.1.17 USWC shall offer AT&T Local Switching that provides feature offerings at parity to those provided by USWC to itself or any other party. Such feature offerings shall include, but are not limited to:
  - (a) Basic and primary rate ISDN;
  - (b) Residential features:
  - (c) Customer Local Area Signaling Services (CLASS/LASS);
  - (d) Centrex (including equivalent administrative capabilities, such as customer accessible reconfiguration and detailed message recording); and
  - (e) Advanced intelligent network triggers supporting AT&T and USWC service applications in USWC's SCP(s). USWC shall offer to AT&T all AIN triggers currently available to USWC for offering AIN-based services in accordance with the technical reference in Section 6.2.1.21.3, including for example:

- (i) Off-Hook Immediate;
- (ii) Off-Hook Delay;
- (iii) Private EAMF Trunk;
- (iv) Shared Interoffice Trunk (EAMF, SS7);
- (v) Termination Attempt;
- (vi) 3/6/10;
- (vii) N11;
- (viii) Feature Code Dialing;
- (ix) Custom Dialing Plan; and
- (x) Automatic Route Selection.
- 6.2.1.18 USWC shall assign each AT&T customer line the class of service designated by AT&T (e.g., using line class codes or other switch specific provisioning methods) and shall route directory assistance calls from AT&T customers to AT&T directory assistance operators at AT&T's option.
- 6.2.1.19 USWC shall assign each AT&T customer line the class of services designated by AT&T (e.g., using line class codes or other switch specific provisioning methods) and shall route operator calls from AT&T customers to AT&T operators at AT&T's option. For example, USWC may translate 0-and 0+ intraLATA traffic and route the call through appropriate trunks to an AT&T Operator Services Position System (OSPS). Calls from Local Switching must pass the ANI-II digits unchanged.
- 6.2.1.20 If AT&T requests the termination of Local Switching, USWC shall promptly remove the class of service assignment from the line.
- 6.2.1.21 If an AT&T customer subscribes to AT&T-provided voice mail and messaging services, USWC shall redirect incoming calls to the AT&T system based upon presubscribed service arrangements (e.g., busy, don't answer, number of rings). In addition, USWC shall provide a Standard Message Desk Interface-Enhanced (SMDI-E) interface to the AT&T system. USWC

shall support the Inter-switch Voice Messaging Service (IVMS) capability.

- 6.2.1.22 Local Switching shall be offered in accordance with the requirements of the following technical references:
  - 6.2.1.22.1 GR-1298-CORE, AIN Switching System Generic Requirements.
  - 6.2.1.22.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements.
  - 6.2.1.22.3 TR-NWT-001284, AIN 0.1 Switching System Generic Requirements.
  - 6.2.1.22.4 SR-NWT-002247, AIN Release 1 Update.

### 6.2.2 Interface Requirements:

- 6.2.2.1 USWC shall provide the following interfaces to loops:
  - (a) Standard Tip/Ring interface including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);
  - (b) Coin phone signaling:
  - (c) Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
  - (d) Two-wire analog interface to PBX;
  - (e) Four-wire analog interface to PBX;
  - (f) Four-wire DS1 interface to PBX or customer provided equipment (e.g. computers and voice response systems);
  - (g) Primary Rate ISDN to PBX, adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
  - (h) Switched Fractional DS1 with capabilities to configure Nx64 channels (where N = 1 to 24); and

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- Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303 and TR-(i) NWT-909 specifications to interconnect Digital Loop Carriers.
- 6.2.2.2 USWC shall provide access to the following, but not limited to:
  - (a) SS7 Signaling Network or Multi-Frequency trunking if requested by AT&T;
  - (b) Interface to AT&T operator services systems or Operator Services through appropriate trunk interconnections for the system; and
  - Interface to AT&T directory assistance services through the AT&T (c) switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other AT&T required access to interexchange carriers as requested through appropriate trunk interfaces.
- 6.3 The requirements set forth in this Section 6.3 apply only to the Data Switching function of Local Switching.

#### 6.3.1.1 Integrated Services Digital Network (ISDN)

Integrated Services Digital Network (ISDN) is defined in two variations. The first variation is Basic Rate ISDN (BRI). BRI consists of 2 Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN (PRI). PRI consists of 23 B Channels and one D Channel. Both BRI and PRI B Channels may be used for voice, Circuit Switched Data (CSD) or Packet Switched Data (PSD). The BRI D Channel may be used for call related signaling, non-call related signaling or packet switched data. The PRI D Channel may be used for call related signaling.

#### 6.3.1.1.1 **Technical Requirements - ISDN**

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USWC shall offer Data Switching providing ISDN that, at a minimum:

- (a) Provides integrated packet handling capabilities:
- (b) Allows for full 2B+D Channel functionality for BRI: and
- (c) Allows for full 23B+D Channel functionality for PRI.
- Each B Channel shall allow for voice, 64 Kbps CSD and PSD of 128 logical

- channels at minimum speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B Channel.
- 6.3.1.1.1.3 Each B Channel shall provide capabilities for alternate voice and data on a per call basis.
- 6.3.1.1.4 The BRI D Channel shall allow for call associated signaling, non-call associated signaling and PSD of 16 logical channels at minimum speeds of 9.6 Kbs throughput of each logical channel up to the total capacity of the D channel.
- 6.3.1.1.1.5 The PRI D Channel shall allow for call associated signaling.
- 6.3.1.1.2 Interface Requirements ISDN
- 6.3.1.1.2.1 USWC shall provide the BRI U interface using 2 wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 6.3.1.1.2.2 USWC shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 6.3.1.1.2.3 USWC shall offer PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore requirements.
- 6.3.1.1.2.4 USWC shall offer PSD trunk interfaces operating at 56 Kbps.
- 6.4 Customized routing
- 6.4.1 Description

Customized routing will enable AT&T to direct particular classes of calls to particular outgoing trunks.

#### 6.4.2 Limitations

Because there is a limitation in the technical feasibility of offering custom routing beyond the capacity of the 1A ESS switch, custom routing will be offered to competitors on a first-come, first-served basis.

### 7. Operator Systems

#### 7.1 Definition

Operator Systems is the Network Element that provides operator and automated call handling and billing, special services, customer telephone listings and optional call completion services. The Operator Systems Network Element provides two types of functions: Operator Service functions and Directory Service functions, each of which are described in detail below.

# 7.2 Operator Service

#### 7.2.1 Definition

Operator Service provides: (a) operator handling for call completion (for example, collect, third number billing, and manual credit card calls); (b) operator or automated assistance for billing after the customer has dialed the called number (for example, credit card calls); and (c) special services, including but not limited to Busy Line Verification and Emergency Line Interrupt (ELI), Emergency Agency Call, Operator-assisted Directory Assistance and Rate Quotes.

### 7.2.2 Requirements

- 7.2.2.1 Operator Services for calls which are routed from the local switch shall be in accordance with the following:
  - 7.2.2.1.1 USWC shall complete 0+ and 0- dialed local calls.
  - 7.2.2.1.2 Intentionally deleted.
  - 7.2.2.1.3 USWC shall complete calls that are billed to a calling card and AT&T shall designate to USWC the acceptable types of special billing.
  - 7.2.2.1.4 USWC shall complete person-to-person calls.
  - 7.2.2.1.5 USWC shall complete collect calls.
  - 7.2.2.1.6 USWC shall provide the capability for callers to bill to a third party and complete such calls.

	7.2.2.1.8	USWC shall process emergency calls.
	7.2.2.1.9	USWC shall process Busy Line Verify and Emergency Line Interrupt requests.
	7.2.2.1.10	USWC shall process emergency call trace.
	7.2.2.1.11	USWC shall process operator-assisted directory assistance calls.
	7.2.2.1.12	USWC shall provide rate quotes.
	7.2.2.1.13	USWC shall process time-and-charges requests.
	7.2.2.1.14	USWC shall route 0- traffic directly to a "live" operator team.
	7.2.2.1.15	If technically feasible, USWC shall brand Operator Service as specified by AT&T. If AT&T's brand designation is not technically feasible, USWC shall provide "unbranded" Operator Service ("unbranded" refers to the absence of any identification of the service provider).
1.22		
7.2.2.2		ervice shall provide AT&T's local service rates when providing and time-and-charges services.
7.2.2.3	Operator Service shall adhere to equal access requirements.	
7.2.2.4	USWC shall exercise at least the same level of fraud control in providing Operator Service to AT&T that USWC provides for its own operator service.	
7.2.2.5	USWC shall perform Billed Number Screening when handling Collect, Person-to-Person and Billed-to-Third-Party calls.	
7.2.2.6	USWC shall provide service measurements and accounting reports as designated by AT&T.	
7.2.2.7	USWC shall direct customer account and other similar inquiries to the customer service center designated by AT&T.	

USWC shall complete station-to-station calls.

7.2.2.1.7

- 7.2.2.8 USWC shall provide an electronic feed of customer call records in "EMR" format to AT&T in accordance with the time schedule designated by AT&T.
- 7.2.2.9 USWC shall accept and process overflow 911 traffic routed from AT&T to the underlying platform used to provide Operator Service.
- 7.2.2.10 USWC shall provide unbundled call completion services wherever and whenever the facilities exist to do so.

#### 7.2.3 Interface Requirements:

With respect to Operator Services for calls that originate on local switching capability provided by or on behalf of AT&T, the interface requirements shall conform to the then-current established system interface specifications for the platform used to provide Operator Service, and the interface shall conform to industry standards.

## 7.3 Directory Service

#### 7.3.1 Definition

Directory Service provides local customer telephone number listings with the option to complete the call at the caller's direction.

#### 7.3.2 Requirements

- 7.3.2.1 Directory Service shall provide up to two listing requests per call and, if requested, shall complete the call to one of the provided listings.
- 7.3.2.2 USWC shall brand Directory Service with the brand designated by AT&T.

  If such branding is not technically feasible, then USWC shall not brand
  Directory Service whatsoever.
- 7.3.2.3 At AT&T's request, USWC shall provide caller-optional directory assistance call completion service which meets the service parity requirements set forth in this Attachment.
- 7.3.2.4 USWC shall provide data regarding billable events as requested by AT&T.

### 7.3.2.5 Directory Service Updates

7.3.2.5.1 USWC shall update customer listings changes daily. These changes include:

New customer connections;

Customer disconnections; and

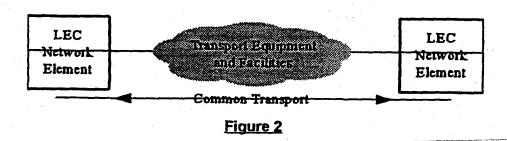
Customer address changes.

7.3.2.6 These updates shall also be provided for non-listed and non-published numbers for use in emergencies.

### 8. Common Transport

#### 8.1 **Definition**

Common Transport is an interoffice transmission path between USWC Network Elements (illustrated in Figure 2). This includes, but is not limited to, shared interoffice transmission paths between USWC's End Offices, between USWC's Serving Wire Centers, between USWC's End Offices and Serving Wire Centers, between USWC's Tandem switches and End Offices and/or Serving Wire Centers, and between such other points within USWC's network as may be designated by AT&T. Where USWC Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common Transport.



# 8.2 Technical Requirements

- 8.2.1 Common Transport provided on DS1 or VT1.5 circuits shall, at a minimum, meet the performance, availability, jitter and delay requirements specified for Central Office-to-Central Office ("CO-to-CO") connections in the technical reference set forth in Section 8.2.4.31.
- 8.2.2 Common Transport provided on DS3 circuits, STS-1 circuits, and higher transmission bit rate circuits shall, at a minimum, meet the performance, availability, jitter and delay requirements specified for CO-to-CO connections in the technical reference set forth in Section 8.2.4.30.
- 8.2.3 USWC shall be responsible for the engineering, provisioning and maintaining the underlying equipment and facilities that are used to provide Common Transport.
- 8.2.4 At a minimum, Common Transport shall meet all of the requirements set forth in the following technical references (as applicable for the transport technology being used):
  - 8.2.4.1 ANSI T1.101-1994, American National Standard for Telecommunications Synchronization Interface Standard Performance and Availability.
  - 8.2.4.2 ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces.
  - 8.2.4.3 ANSI T1.102.01-199x, American National Standard for Telecommunications Digital Hierarchy VT1.5.
  - 8.2.4.4 ANSI T1.105-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats.
  - 8.2.4.5 ANSI T1.105.01-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Automatic Protection Switching.
  - 8.2.4.6 ANSI T1.105.02-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Payload Mappings.
  - 8.2.4.7 ANSI T1.105.03-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Jitter

#### at Network Interfaces.

- 8.2.4.8 ANSI T1.105.03a-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET): Jitter at Network Interfaces DS1 Supplement.
- 8.2.4.9 ANSI T1.105.05-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) -Tandem Connection.
- 8.2.4.10 ANSI T1.105.06-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Physical Layer Specifications.
- 8.2.4.11 ANSI T1.105.07-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Sub STS-1 Interface Rates and Formats.
- 8.2.4.12 ANSI T1.105.09-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Network Element Timing and Synchronization.
- 8.2.4.13 ANSI T1.106-1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode).
- 8.2.4.14 ANSI T1.107-1988, American National Standard for Telecommunications Digital Hierarchy Formats Specifications.
- 8.2.4.15 ANSI T1.107a-1990 American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications (DS3 Format Applications).
- 8.2.4.16 ANSI T1.107b-1991 American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications.
- 8.2.4.17 ANSI T1.117-1991, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (SONET) (Single Mode Short Reach).

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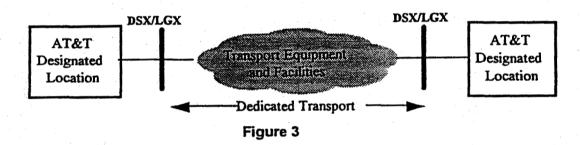
8.2.4.18	ANSI T1.403-1989, Carrier to Customer Installation, DS1 Metallic Interface Specification.		
8.2.4.19	ANSI T1.404-1994, Network-to-Customer Installation - DS3 Metallic Interface Specification.		
8.2.4.20	ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH).		
8.2.4.21	ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels.		
8.2.4.22	Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements.		
8.2.4.23	Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance.		
8.2.4.24	Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria.		
8.2.4.25	Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.).		
8.2.4.26	Bellcore TR-NWT-000776, Network Interface Description for ISDN Customer Access.		
8.2.4.27	Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1 February 1991.		
8.2.4.28	Bellcore ST-TEC 000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue I May 1989.		
8.2.4.29	Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition. Issue 1-August 1987.		
8.2.4.30	AT&T Technical Reference 54014, ACCUNET T45 Service Description and Interface Specification, May 1992.		

8.2.4.31 AT&T Technical Reference TR 62411 ACCUNET T1.5 Service Description And Interface Specification, December 1990 and all addenda.

# 9. Dedicated Transport

#### 9.1 Definition

9.1.1 Dedicated Transport is an interoffice transmission path between AT&T designated locations. Such locations may include USWC central offices or other equipment locations, AT&T network components, other carrier network components, or customer premises. Dedicated Transport is depicted below in Figure 3.



- 9.1.2 USWC shall offer Dedicated Transport in each of the following ways:
- 9.1.2.1 As capacity on a shared circuit.
- 9.1.2.2 As a circuit (e.g., DS1, DS3, STS-1) dedicated to AT&T.
- 9.1.2.3 As a system (i.e., the equipment and facilities used to provide Dedicated Transport such as SONET ring) dedicated to AT&T.
- 9.1.3 When Dedicated Transport is provided as a circuit or as capacity on a shared circuit, it shall include (as appropriate):

Multiplexing functionality;

Grooming functionality; and,

Redundant equipment and facilities necessary to support protection and restoration.

- 9.1.4 When Dedicated Transport is provided as a system it shall include:
  - 9.1.4.1 Transmission equipment such as multiplexers, line terminating equipment, amplifiers and regenerators;
  - 9.1.4.2 Inter-office transmission facilities such as optical fiber, copper twisted pair and coaxial cable; and
  - 9.1.4.3 Redundant equipment and facilities necessary to support protection and restoration.
  - 9.1.4.4 Dedicated Transport also includes the Digital Cross-Connect System (DCS) functionality as an option. DCS is described below in Section 9.5.

### 9.2 Technical Requirements

This Section sets forth technical requirements for all Dedicated Transport.

- 9.2.1 When USWC provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS1, DS3, STS-1) shall be dedicated to AT&T designated traffic.
- 9.2.2 USWC shall offer Dedicated Transport in all currently available technologies including, but not limited to, DS1 and DS3 transport systems, SONET (or SDH) Bidirectional Line Switched Rings, SONET (or SDH) Unidirectional Path Switched Rings, and SONET (or SDH) point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.
- 9.2.3 For DS1 or VT1.5 circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter and delay requirements specified for Customer Interface to Central Office "CI-to-CO" connections in the technical reference set forth in Section 8.2.4.31.
- 9.2.4 For DS3 circuits, STS-1 circuits, and higher rate circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter and delay requirements specified for Customer Interface to Central Office "CI-to-CO" connections in the technical reference set forth in Section 8.2.4.30.

- 9.2.5 When requested by AT&T, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 9.2.6 When physical diversity is requested by AT&T, USWC shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by AT&T).
- 9.2.7 Upon AT&T's request, USWC shall provide real-time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, AT&T's traffic.
- 9.2.8 USWC shall offer the following interface transmission rates for Dedicated Transport:
  - 9.2.8.1 DS1 (Extended SuperFrame ESF, D4, and unframed applications shall be provided);
  - 9.2.8.2 DS3 (C-bit Parity, M13, and unframed applications shall be provided);
  - 9.2.8.3 SONET standard interface rates in accordance with ANSI T1.105 and ANSI T1.105.07 and physical interfaces per ANSI T1.106.06 (including referenced interfaces). In particular, VT1.5 based STS-1s will be the interface at an AT&T service node; and
  - 9.2.8.4 SDH Standard interface rates in accordance with International Telecommunications Union (ITU) Recommendation G.707 and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.
- 9.2.9 USWC shall provide cross-office wiring up to a suitable Point of Termination (POT) between Dedicated Transport and AT&T designated equipment. USWC shall provide the following equipment for the physical POT:
  - (a) DSX1 for DS1s or VT1.5s;
  - (b) DSX3 for DS3s or STS-1s; and
  - (c) LGX for optical signals (e.g., OC-3 and OC-12).
- 9.2.10 USWC shall provide physical access to the POT for personnel designated

- by AT&T (for testing, facility interconnection and other purposes designated by AT&T) 24 hours a day, 7 days a week.
- 9.2.11 For Dedicated Transport provided as a system, USWC shall design the system (including but not limited to facility routing and termination points) according to AT&T specifications.
- 9.2.12 Upon AT&T's request, USWC shall provide AT&T with electronic provisioning control of an AT&T specified Dedicated Transport.
- 9.2.13 USWC shall offer Dedicated Transport together with and separately from DCS.
- 9.3 Technical Requirements for Dedicated Transport Using SONET Technology

This Section sets forth additional technical requirements for Dedicated Transport using SONET technology including rings, point-to-point systems and linear add-drop systems.

- 9.3.1 All SONET Dedicated Transport provided as a system shall:
  - 9.3.1.1 Be synchronized from both a primary and secondary Stratum 1 level timing source. Additional detail on synchronization requirements are given in Section 14.4.
  - 9.3.1.2 Provide SONET standard interfaces which properly interwork with SONET standard equipment from other vendors. This includes, but is not limited to, SONET standard Section, Line and Path performance monitoring, maintenance signals, alarms and data channels.
  - 9.3.1.3 Provide Data Communications Channel (DCC) or equivalent connectivity through the SONET transport system. Dedicated Transport provided over a SONET transport system shall be capable of routing DCC messages between AT&T SONET network components connected to the Dedicated Transport. For example, if AT&T leases a SONET ring from USWC, that ring shall support DCC message routing between AT&T SONET network components connected to the ring.
  - 9.3.1.4 Support the following performance requirements for each circuit

### (STS-1, DS1, DS3, etc.):

- (a) No more than 10 Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 9.4.5); and
- (b) No more than 1 Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 9.4.5).

### 9.3.2 All SONET rings shall:

- 9.3.2.1 Be provisioned on physically diverse fiber optic cables (including separate building entrances where available and diversely routed intra-office wiring). "Diversely routed" shall be interpreted as the maximum feasible physical separation between transmission paths, unless otherwise agreed by AT&T.
- 9.3.2.2 Support dual ring interworking per SONET Standards.
- 9.3.2.3 Provide the necessary redundancy in optics, electronics and transmission paths (including intra-office wiring) such that no single failure will cause a service interruption.
- 9.3.2.4 Provide the ability to use the protection channels to carry traffic (extra traffic). This requirement applies to line switched rings only.
- 9.3.2.5 Provide 50 millisecond restoration unless a ring protection delay is set to accommodate dual ring interworking schemes.
- 9.3.2.6 Have settable ring protection switching thresholds that shall be set in accordance with AT&T's specifications.
- 9.3.2.7 Provide revertive protection switching with a settable wait to restore delay with a default setting of 5 minutes. This requirement applies to line switched rings only.
- 9.3.2.8 Provide non-revertive protection switching. This requirement applies to path switched rings only.
- 9.3.2.9 Adhere to the following availability requirements, where availability is defined in the technical reference set forth in Section 9.4.5.

No more than 0.25 minutes of unavailability month; and

No more than 0.5 minutes of unavailability per year.

- 9.4 At a minimum, Dedicated Transport shall meet each of the requirements set forth in Section 97.2.4 and in the following technical references:
  - 9.4.1 ANSI T1.105.04-1995, American National Standard for Telecommunications
     Synchronous Optical Network (SONET) Data Communication Channel Protocols and Architectures.
  - 9.4.2 ANSI T1.119-1994, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications.
  - 9.4.3 ANSI T1.119.01-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment.
  - 9.4.4 ANSI T1.119.02-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment.
  - 9.4.5 ANSI T1.231-1993 -American National Standard for Telecommunications -Digital Hierarchy - Layer 1 In-Service Digital Transmission performance monitoring.
  - 9.4.6 AT&T Technical Reference TR 54016, Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format, September 1989.
  - 9.4.7 AT&T Technical Reference TR 62421 ACCUNET Spectrum of Digital Services Description And Interface Specification, December 1989 and all addenda.
  - 9.4.8 AT&T Technical Reference TR 62310, DS0 Digital Local Channel Description And Interface Specification, August 1993 and all addenda.
  - 9.4.9 AT&T Technical Reference TR 62415, Access Specification For High

Capacity (DS1/DS3) Dedicated Digital Service, June 1989 and all addenda.

## 9.5 Digital Cross-Connect System (DCS)

#### 9.5.1 Definition

- 9.5.1.1 DCS is a function which provides automated cross connection of Digital Signal level 0 (DS0) or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include but are not limited to DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS1 rate or greater with cross-connection typically at the DS0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as,3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1s) or other Synchronous Optical Network (SONET) signals (e.g., STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (e.g., DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.
- 9.5.1.2 In locations where automated cross connection capability does not exist, DCS will be defined as the combination of the functionality provided by a Digital Signal Cross-Connect (DSX) or Light Guide Cross-Connect (LGX) patch panels and D4 channel banks or other DS0 and above multiplexing equipment used to provide the function of a manual cross connection.
- 9.5.1.3 Interconnection between a DSX or LGX, to a switch, another cross-connect, or other service platform device, is included as part of DCS.

#### 9.6 DCS Technical Requirements

- 9.6.1 DCS shall provide completed end-to-end cross connection of the channels designated by AT&T.
- 9.6.2 DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast and facility test functions.
- 9.6.3 DCS shall provide multiplexing, format conversion, signaling conversion or other functions.

- 9.6.4 The end-to-end cross connection assignment shall be input to the underlying device used to provide DCS from an operator at a terminal or via an intermediate system. The cross connection assignment shall remain in effect whether or not the circuit is in use.
- 9.6.5 USWC shall continue to administer and maintain DCS, including updates to the control software to current available releases.
- 9.6.6 USWC shall provide various types of Digital Cross-Connect Systems including:
  - 9.6.6.1 DS0 cross-connects (typically termed DCS 1/0);
  - 9.6.6.2 DS1/VT1.5 (Virtual Tributaries at the 1.5Mbps rate) cross-connects (typically termed DCS 3/1);
  - 9.6.6.3 DS3 cross-connects (typically termed DCS 3/3);
  - 9.6.6.4 STS-1 cross-connects; and
  - 9.6.6.5 Other technically feasible cross-connects designated by AT&T.
- 9.6.7 USWC shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (i.e., USWC shall establish the processes to implement cross connects on demand, or, at AT&T's option, permit AT&T control of such configurations and reconfigurations).
- 9.6.8 USWC shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., USWC shall establish the processes to implement cross connects on the schedule designated by AT&T, or, at AT&T's option, permit AT&T to control such configurations and reconfigurations).
- 9.6.9 DCS shall continuously monitor protected circuit packs and redundant common equipment.
- 9.6.10 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 9.6.11 The underlying equipment used to provide DCS shall be equipped with a redundant power supply or a battery back-up.
- 9.6.12 USWC shall make available to AT&T spare facilities and equipment

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necessary for provisioning repairs and necessary to meet AT&T's Direct Measures Of Quality (DMOQs) as specified in the Provisioning and Maintenance sections.

- 9.6.13 At AT&T's option, USWC shall provide AT&T with real-time performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact AT&T's services. For example, this may include hardware alarm data and facility alarm data on a DS3 in which an AT&T DS1 is traversing.
- 9.6.14 At AT&T's option, USWC shall provide AT&T with real-time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation.
- 9.6.15 DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS1 or STS-1 to DS3).
- 9.6.16 DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (e.g., Optical Carrier level 3, i.e., OC-3 interfaces on a DCS 3/1).
- 9.6.17 DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring.
- 9.6.18 DCS shall provide multipoint bridging of multiple channels to other DCSs. AT&T may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries.
- 9.6.19 DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by AT&T.
- 9.6.20 DCS shall perform signaling conversion and data conditioning as designated by AT&T. Such functions shall comply, at a minimum, with AT&T Technical Reference TR 62421 ACCUNET® Spectrum of Digital Services, December 1989 and AT&T Technical Reference TR 62310 DS0 Digital Local Channel Description and Interface Specification, August 1993, including current addendums.

### 9.7 DCS Interface Requirements

- 9.7.1 USWC shall provide physical interfaces on DS0, DS1 and VT1.5 channel cross-connect devices at the DS1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU and AT&T standards.
- 9.7.2 USWC shall provide physical interfaces on DS3 channel cross-connect devices at the DS3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU and AT&T standards.
- 9.7.3 USWC shall provide physical interfaces on STS-1 cross-connect devices at the OC-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU and AT&T standards.
- 9.7.4 Interfaces on all other cross-connect devices shall be in compliance with applicable Bellcore, ANSI, ITU and AT&T standards.
- 9.8 DCS shall, at a minimum, meet all the requirements set forth in the following technical references:
  - 9.8.1 AT&T Technical Reference TR 62421 ACCUNET® Spectrum of Digital Services Description And Interface Specification, December 1989 and TR 62421A Addendum 2, November 1992.
  - 9.8.2 AT&T Data Communications Technical Reference TR 62310 DS0 Digital Local Channel Description and Interface Specification, August 1993, and all addendums.
  - 9.8.3 AT&T Technical Reference TR 62415 Access Specification For High Capacity (DS1/DS3) Dedicated Digital Service, June 1989, and all addendums including TR 62415A3 July, 1992.
  - 9.8.4 AT&T Technical Reference TR 62411 ACCUNET® T1.5 Service Description And Interface Specification, December 1990 and all addendums including Addendum 2, October 1992.
  - 9.8.5 AT&T Technical Reference TR 54014 ACCUNET® T45 and T45 Reserved Services Service Description And Interface Specification.
  - 9.8.6 AT&T Technical Reference TR 54018 OC-3 Optical Interface Specifications, November 1991.

- 9.8.7 AT&T Technical Reference TR 54016 Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format, September 1989.
- 9.8.8 ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces.
- 9.8.9 ANSI T1.102.01-199x, American National Standard for Telecommunications Digital Hierarchy VT1.5.
- 9.8.10 ANSI T1.105-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats.
- 9.8.11 ANSI T1.105.03-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Jitter at Network Interfaces.
- 9.8.12 ANSI T1.105.03a-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET): Jitter at Network Interfaces DS1 Supplement.
- 9.8.13 ANSI T1.105.06-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Physical Layer Specifications.
- 9.8.14 ANSI T1.106-1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode).
- 9.8.15 ANSI T1.107-1988, American National Standard for Telecommunications Digital Hierarchy Formats Specifications.
- 9.8.16 ANSI T1.107a-1990 American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications (DS3 Format Applications).
- 9.8.17 ANSI T1.107b-1991 American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications.

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9.8.18	ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach).		
9.8.19	ANSI T1.403-1989, Carrier to Customer Installation, DS1 Metallic Interface Specification.		
9.8.20	ANSI T1.404-1994, Network-to-Customer Installation - DS3 Metallic Interface Specification.		
9.8.21	ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH).		
9.8.22	ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels.		
9.8.23	FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements.		
9.8.24	GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance.		
9.8.25	GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria.		
9.8.26	TR-NWT-000776, Network Interface Description for ISDN Customer Access.		

# 10. Signaling Link Transport

### 10.1 **Definition**

Signaling Link Transport is a set of two or four dedicated 56 Kbps. transmission paths between AT&T-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

# 10.2 Technical Requirements

10.2.1 Signaling Link Transport shall consist of full duplex mode 56 Kbps

transmission paths.

- 10.2.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:
  - (a) As an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch (STPs) pair; and
  - (b) As a "D-link" which is a connection between two STPs pairs in different company networks (e.g., between two STPs pairs for two Competitive Local Exchange Carriers (CLECs)).
- 10.2.3 Signaling Link Transport shall consist of two or more signaling link layers as follows:
  - (a) An A-link layer shall consist of two links.
  - (b) A D-link layer shall consist of four links.
- 10.2.4 A signaling link layer shall satisfy a performance objective such that:
  - (a) there shall be no more than two minutes down time per year for an Alink layer; and
  - (b) there shall be negligible (less than 2 seconds) down time per year for a D-link layer.
- 10.2.5 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
  - (a) no single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two separate physical paths end-to-end); and
  - (b) no two concurrent failures of facilities or equipment shall cause the failure of all four links in a D-link layer (i.e., the links should be provided on a minimum of three separate physical paths end-to-end).

#### 10.3 Interface Requirements

10.3.1 There shall be a DS1 (1.544 Mbps) interface at the AT&T-designated SPOIs.

Each 56 kbps transmission path shall appear as a DS0 channel within the DS1 interface.

### 11. Signaling Transfer Points (STPs)

#### 11.1 Definition

Signaling Transfer Points offer a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which, in turn, enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches. Figure 4 depicts Signaling Transfer Points.

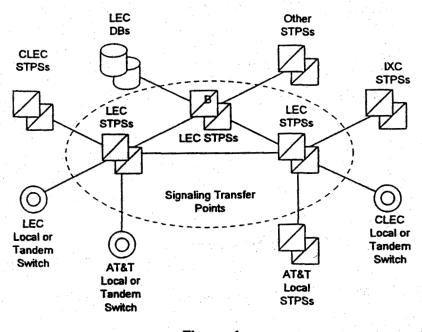


Figure 4

### 11.2 Technical Requirements

11.2.1 STPs shall provide access to all other Network Elements connected to the USWC SS7 network. These include:

- (a) USWC Local Switching or Tandem Switching;
- (b) USWC Service Control Points/DataBases;
- (c) Third-party local or tandem switching systems; and
- (b) Third-party-provided STPSs.
- The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to USWC's SS7 network. This explicitly includes the use of USWC's SS7 network to convey messages which neither originate nor terminate at a signaling end-point directly connected to the USWC SS7 network (i.e., transient messages). When the USWC SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.
- If a USWC tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an AT&T local switch and third-party local switch, USWC's SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall and Screening List Editing) between the AT&T local STPs and the STPs that provide connectivity with the third-party local switch, even if the third-party local switch is not directly connected to USWC's STPs.
- 11.2.4 STPs shall provide all functions of the MTP as specified in the relevant Bellcore standards. This includes:
  - (a) Signaling Data Link functions, as specified in the relevant Bellcore standards;
  - (b) Signaling Link functions, as specified in the relevant Bellcore standards; and
  - (c) Signaling Network Management functions, as specified in the relevant Bellcore standards.
- 11.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in the relevant Bellcore standards. In particular, this includes Global Title Translation (GTT) and SCCP

Management procedures, as specified in the relevant Bellcore standards. In cases where the destination signaling point is a USWC local or tandem switching system or data base, or is an AT&T or third-party local or tandem switching system directly connected to USWC's SS7 network, STPs shall perform final GTT of messages to the destination and the SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPSs in an SS7 network connected with the USWC SS7 network, and shall not perform SCCP Subsystem Management of the destination.

- 11.2.6 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in the relevant Bellcore standards, when this capability becomes available on USWC STPSs.
- 11.2.7 STPs shall provide all functions of the OMAP commonly provided by STPSs, as specified in the reference in Section 11.5. This includes:

MTP Routing Verification Test (MRVT); and

SCCP Routing Verification Test (SRVT).

- In cases where the destination signaling point is a USWC local or tandem switching system or DB, or is an AT&T or third-party local or tandem switching system directly connected to the USWC SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPSs in an SS7 network connected with the USWC SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved Bellcore standards and available capabilities of USWC STPSs.
- 11.2.9 STPs shall be equal to or better than the following performance requirements:

MTP Performance, as specified in the relevant Bellcore standards; and

SCCP Performance, as specified in the relevant Bellcore standards.

## 11.3 Interface Requirements

- 11.3.1 USWC will provide access via the STP to call related databases used in AIN services. The Parties agree to work in the industry to define the mediated access mechanisms for STP access. Access to the USWC SMS will be provided to AT&T to create, modify or update information in the call related databases, equivalent to the USWC access.
- 11.3.2 USWC will offer unbundled signaling via LIS-Common Channel Signaling Capability (CCSAC). CCSAC service utilizes the SS7 network and provides access to call-related databases that reside at USWC 's SCPs, such as the Line Information Database (LIDB) and the 800 Database. The access to USWC's SCPs will be mediated via the STP Port in order to assure network reliability.

### 11.3.3 CCSAC includes:

- 11.3.3.1 Entrance Facility This element connects AT&T's signaling point of interface with the USWC serving wire center (SWC). AT&T may purchase this element or it may self-provision the entrance facility. If the entrance facility is self-provisioned, AT&T would need to purchase collocation and an expanded interconnection channel termination.
- Direct Link Transport (DLT) This element connects the SWC to the USWC STP. AT&T may purchase this element or self-provision transport directly to the STP. If AT&T provides the link to the STP, it must purchase collocation and an expanded interconnection channel termination at the STP location.
- 11.3.3.3 STP Port This element provides the switching function at the STP. One STP Port is required for each DLT Link. The Port provides access to the Service Control Point (SCP).
- 11.3.3.4 USWC shall allow direct connection to its STP ports. Purchase of an STP port shall not depend upon purchase of a signaling link.
- 11.3.4 USWC shall provide the following STPs options to connect AT&T or AT&T-designated local switching systems or STPs to the USWC SS7 network:
- 11.3.4.1 An A-link interface from AT&T local switching systems; and
- 11.3.4.2 A D-link interface from AT&T local STPs.

- 11.3.5 Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:
- 11.3.5.1 An A-link layer shall consist of two links, as depicted in Figure 6.

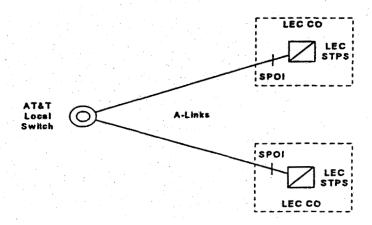
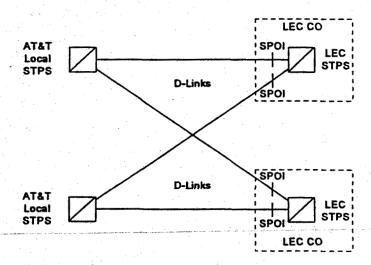


Figure 6. A-Link Interface

A D-link layer shall consist of four links, as depicted in Figure 7.



### Figure 7.D-Link Interface

- 11.3.6 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where the USWC STPs are located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. USWC shall offer higher rate DS1 signaling for interconnecting AT&T local switching systems or STPs with USWC STPs as soon as these become approved ANSI standards and available capabilities of USWC STPs.
- 11.3.7 USWC's CO shall provide intraoffice diversity between the SPOIs and USWC's STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to USWC STPs.
- 11.3.8 USWC shall provide MTP and SCCP protocol interfaces that shall conform to all sections relevant to the MTP or SCCP in the following specifications:
  - 11.3.8.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP).
  - 11.3.8.2 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

#### 11.4 Message Screening

- 11.4.1 USWC shall set message screening parameters so as to accept messages from AT&T local or tandem switching systems destined to any signaling point in the USWC SS7 network with which the AT&T switching system has a legitimate signaling relation.
- 11.4.2 USWC shall set message screening parameters so as to accept messages from AT&T local or tandem switching systems destined to any signaling point or network interconnected within the USWC SS7 network with which the AT&T switching system has a legitimate signaling relation.
- 11.4.3 USWC shall set message screening parameters so as to accept messages

destined to an AT&T local or tandem switching system from any signaling point or network interconnected within the USWC SS7 network with which the AT&T switching system has a legitimate signaling relation.

11.4.4 USWC shall set message screening parameters so as to accept and send messages destined to an AT&T SCP from any signaling point or network interconnected within the USWC SS7 network with which the AT&T SCP has a legitimate signaling relation.

# 11.5 STP Requirements

11.5.1 STPs shall be equal to or better than all of the requirements for STPs set forth in the relevant Bellcore standards:

11.5.2	Intentionally deleted.
11.5.3	Intentionally deleted.
11.5.4	Intentionally deleted.
11.5.5	Intentionally deleted.
11.5.6	Intentionally deleted.
11.5.7	Intentionally deleted.
11.5.8	Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated
	Services Digital Network User Part (ISDNUP).
11.5.9	Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection

Control Part (SCCP) and Transaction Capabilities Application

# 12. Service Control Points/Call Related Databases

Part (TCAP).

#### 12.1 Definition

Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, AIN, Toll Free Number Database and Automatic Location Identification/Data Management System.

A Service Control Point (SCP) is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., an 800 database stores customer record data that provides information necessary to route 800 calls).

## 12.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this section address storage of information, access to information (e.g., signaling protocols, response times) and administration of information (e.g., provisioning, administration and maintenance). All SCPs/Databases shall be provided to AT&T in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subsections 12.3 through 12.7:

- 12.2.1 USWC shall provide physical interconnection to SCPs through the SS7 network and protocols (via USWC's STPs), as specified in Section 11 of this Attachment, with TCAP as the application layer protocol.
- 12.2.2 USWC shall provide virtual interconnection to databases via STP industry standard interfaces and protocols (e.g., ISDN and X.25).
- 12.2.3 The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in Section 11 of this Attachment (which applies to both SS7 and non-SS7 interfaces).
- 12.2.4 Database functionality shall be unavailable a maximum of 30 minutes per year.
- 12.2.5 USWC shall provide Database provisioning consistent with the provisioning requirements of this Agreement (e.g., data required, edits,

acknowledgments, data format and transmission medium, and notification of order completion).

- 12.2.6 The operational interface provided by USWC shall permit USWC to complete Database transactions (i.e., add, modify, delete) for AT&T customer records stored in USWC databases within 24 hours, or sooner where USWC provisions its own customer records within a shorter interval.
- 12.2.7 USWC shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of USWC Network Affecting Events, testing, dispatch schedule, and measurement and exception reports).
- 12.2.8 USWC shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 12.2.9 USWC shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.
- 12.2.10 USWC shall provide SCPs/Databases in accordance with the logical security requirements specified in this Agreement.

# 12.3 Local Number Portability Database

#### 12.3.1 Definition

The Local Number Portability (LNP) database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. LNP database functionality shall also include Global Title Translations (GTT) for calls involving ported numbers even if USWC provides GTT functionality in another Network Element. This Subsection 12.3 supplements the requirements of Subsection 12.2 and 12.7. USWC shall provide the Local Number Portability Database in accordance with the following:

- 12.3.2 Requirements
- 12.3.2.1 USWC shall make USWC LNP database available for AT&T switches to

query to obtain: (a) the appropriate routing number on calls to ported numbers or (b) the industry specified indication that the number is not ported for non-ported numbers in NPA-NXXs that are open to portability. The specified indication will also be provided when the NPA-NXX is not open to portability.

- 12.3.2.2 Query responses shall provide such additional information (e.g., Service Provider identification) as may be specified in the LNP implementation in the relevant regulatory jurisdiction.
- 12.3.2.3

  USWC shall provide GTT for CLASS or LIDB queries routed to the USWC network by AT&T switches. USWC database or other Network Elements shall perform the GTT function and route the query to the appropriate switch or LIDB accordingly.
- 12.3.2.4 The LNP database shall provide such other functionality as has been specified in the regulatory jurisdiction in which portability has been implemented.
- 12.3.2.5 Unavailability of the LNP database query and GTT applications shall not exceed 4 minutes per year.
- 12.3.2.6 The USWC LNP database shall respond to a query within 125 msec. of receipt of the query.

#### 12.3.3 Interface Requirements

USWC shall interconnect the signaling interface between the AT&T or other local switch and the LNP database using the TCAP protocol as specified in the technical reference in Section 12.7.1, together with the signaling network interface as specified in the technical reference in Section 12.7.2, and such further requirements (e.g., AIN or IN protocols) as may be specified by bodies responsible for implementation of number portability in the jurisdiction at hand; (e.g., Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.3, Final Draft, March 22, 1996 [Editor - Ameritech Inc.]).

## 12.3.4 Line Information Database (LIDB).

This Subsection 12.4 defines and sets forth additional requirements for the Line Information Database. This Subsection 12.4 supplements the requirements of

Subsection 12.2 and 12.7.

### 12.4.1 Definition:

The Line Information Database (LIDB) is a transaction-oriented database accessible through Common Channel Signaling (CCS) networks. It contains records associated with customer Line Numbers and Special Billing Numbers (in accordance with the requirements in the technical reference in Section 12.7.5). LIDB accepts queries from other Network Elements or AT&T's network and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers that provides the ability to accept Collect or Third-Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the USWC CCS network and other CCS networks. LIDB also interfaces to administrative systems. The administrative system interface provides Work Centers with an interface to LIDB for functions such as provisioning, auditing of data, access to LIDB measurements and reports.

# 12.4.2 Technical Requirements

- Prior to the availability of a long-term solution for Local Number Portability, USWC shall enable AT&T to store in USWC's LIDB any customer Line Number or Special Billing Number record (in accordance with the technical reference in Section 12.7.5), whether ported or not, for which the NPA-NXX or NXX-0/1XX Group is supported by that LIDB.
- Prior to the availability of a long-term solution for Local Number Portability, USWC shall enable AT&T to store in USWC's LIDB any customer Line Number or Special Billing Number (in accordance with the technical reference in Section 12.7.5) record, whether ported or not, and NPA-NXX and NXX-0/1XX Group Records belonging to an NPA-NXX or NXX-0/1XX owned by AT&T.
- 12.4.2.3 Subsequent to the availability of a long-term solution for Local Number Portability, USWC shall enable AT&T to store in USWC's LIDB any customer Line Number or Special Billing Number (in accordance with the technical reference in Section 12.7.5) record, whether ported or not, regardless of the number's NPA-NXX or NXX-0/1XX.
- 12.4.2.4 USWC shall perform the following LIDB functions (i.e., processing the following query types as defined in the technical reference in Section 12.7.5)

### for AT&T's customer records in LIDB:

- (a) Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls); and
- (b) Calling Card Validation
- USWC shall process AT&T's customer records in LIDB at least at parity with USWC customer records with respect to other LIDB functions (as defined in the technical reference in Section 12.7.5). USWC shall indicate to AT&T what additional functions (if any) are performed by LIDB in its network.
- 12.4.2.6 Within two (2) weeks after a request by AT&T, USWC shall provide AT&T with a list of the customer data items which AT&T would have to provide in order to support each required LIDB function. The list shall indicate which data items are essential to LIDB functions and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.
- 12.4.2.7 USWC shall provide LIDB systems such that operating deficiencies that would result in blocked calls shall not exceed 30 minutes per year.
- 12.4.2.8 USWC shall provide LIDB systems such that operating deficiencies, other than those described in Subsection 12.4.2.7 above, shall not exceed 12 hours per year.
- 12.4.2.9 USWC shall provide LIDB systems such that the LIDB function shall be in overload (degraded performance in accordance with the technical reference in Section 12.7.5) no more than 12 hours per year. Such deficiency period is in addition to the periods specified in Sections 12.4.2.7 and 12.4.2.8 above.
- 12.4.2.10 USWC shall provide AT&T with the capability to provision (e.g., to add, update and delete) NPA-NXX and NXX-0/1XX Group Records, and Line Number and Special Billing Number Records associated with AT&T customers via SMS into USWC's LIDB provisioning process.
- 12.4.2.11 Unless directed otherwise by AT&T, in the event that end user customers change their local service provider, USWC shall maintain customer data (for line numbers, card numbers and for any other types of data maintained in

- LIDB) so that such customers shall not experience any interruption of service due to the lack of such maintenance of customer data.
- 12.4.2.12 All additions, updates and deletions of AT&T data to the LIDB shall be solely at the direction of AT&T.
- 12.4.2.13 USWC shall provide priority updates to LIDB for AT&T data upon AT&T's request (e.g., to support fraud protection).
- 12.4.2.14 USWC shall provide AT&T the capability to directly obtain, through an electronic interface, reports of all AT&T data in LIDB.
- 12.4.2.15 USWC shall provide LIDB systems such that no more than 0.01% of AT&T customer records will be missing from LIDB, as measured by AT&T audits.
- 12.4.2.16 USWC shall perform backup and recovery of all of AT&T's data in LIDB as frequently as AT&T may reasonably specify, including sending to LIDB all changes made since the date of the most recent backup copy.
- 12.4.2.17 USWC shall provide AT&T access to LIDB measurements and reports at least at parity with the capability USWC has for its own customer records and that USWC provides to any other party. Such access shall be electronic.
- 12.4.2.18 USWC shall provide AT&T with LIDB reports of data which are missing or contain errors, as well as any misroute errors, within the time period reasonably designated by AT&T.
- 12.4.2.19 USWC shall prevent any access to, or use of, AT&T data in LIDB by USWC personnel or by any other party that lacks AT&T authorization, in writing, for such access or use.
- 12.4.2.20 USWC shall provide AT&T access to the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners, (in accordance with the technical reference in Section 12.7.5) for Customer Data that is part of an NPA-NXX or NXX-0/1XX wholly or partially owned by AT&T at least at parity with USWC Customer Data. USWC shall obtain from AT&T the screening information associated with LIDB Data Screening of AT&T data in accordance with this requirement.

- 12.4.2.21 USWC shall accept queries to LIDB associated with AT&T customer records and shall return responses in accordance with the requirements of this Section 12.
- 12.4.2.22 USWC shall provide mean processing time at the LIDB within 0.50 seconds under normal conditions, as defined in the technical reference in Section 12.7.5.
- 12.4.2.23 USWC shall provide processing time at the LIDB within 1 second for 99% of all messages under normal conditions, as defined in the technical reference in Section 12.7.5.
- 12.4.2.24 USWC shall provide 99.9 % of all LIDB queries in a round-trip response within 2 seconds.
- 12.4.2.25 USWC shall provide LIDB performance that complies with the following AT&T Direct Measures of Quality (DMOQs):
- 12.4.2.25.1 There shall be at least a 99.9.% reply rate to all query attempts.
- 12.4.2.25.2 Queries shall time out at LIDB no more than 0.1% of the time.
- 12.4.2.25.3 Data in LIDB replies shall have at no more than 2% unexpected data values for all queries to LIDB.
- 12.4.2.25.4 No more than 0.01% of all LIDB queries shall return a missing customer record.
- 12.4.2.25.5 There shall be no defect in LIDB Data Screening of responses.
- 12.4.2.25.6 Group troubles shall occur for no more than 1% of LIDB queries. Group troubles include:
  - (a) Missing Group When reply is returned "vacant" but there is no active record for the 6-digit NPA-NXX group.
  - (b) Vacant Code When a 6-digit code is active but is not assigned to any customer on that code.
  - (c) Non-Participating Group and unavailable Network Resource should be identified in the LARG (LIDB Access Routing Guide) so AT&T

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does not pay access for queries that will be denied in LIDB.

### 12.4.3 Interface Requirements

USWC shall offer LIDB in accordance with the requirements of this subsection 12.4.3.

- 12.4.3.1 The interface to LIDB shall be in accordance with the technical reference in Section 12.7.3.
- 12.4.3.2 The CCS interface to LIDB shall be the standard interface described in Section 12.7.3.
- 12.4.3.3 The LIDB Data Base interpretation of the ANSI-TCAP messages shall comply with the technical reference in Section 12.7.4. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

#### 12.5 Toll Free Number Database

The Toll Free Number Database is an SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional, so-called vertical features during call set-up in response to queries from SSPs. This Subsection 12.5 supplements the requirements of Subsection 12.2 and 12.7. USWC shall provide the Toll Free Number Database in accordance with the following:

# 12.5.1 Technical Requirements

- 12.5.1.1 USWC shall make the USWC Toll Free Number Database available for AT&T to query from AT&T's designated switch (which includes USWC's Local Switching when purchased by AT&T as a Network Element) with a toll-free number and originating information.
- 12.5.1.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a USWC switch.
- 12.5.1.3 The SCP shall also provide, at AT&T's option, such additional features as described in SR-TSV-002275 (BOC Notes on the USWC Networks, SR-TSV-

002275, Issue 2, (Bellcore, April 1994)) as are available to USWC. These may include but are not limited to:

- (a) Network Management;
- (b) Customer Sample Collection; and
- (c) Service Maintenance.

## 12.5.2 Interface Requirements

The signaling interface between the AT&T or other local switch and the Toll-Free Number database shall use the TCAP protocol as specified in the technical reference in Section 12.7.1, together with the signaling network interface as specified in the technical reference in Sections 12.7.2 and 12.7.6

# 12.6 Automatic Location Identification/Data Management System (ALI/DMS)

The ALI/DMS Database contains customer information (including name, address, telephone information, and sometimes special information from the local service provider or customer) used to determine to which Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. This Subsection 12.6 supplements the requirements of Subsection 12.7.2 and 12.7.6. USWC shall provide the Emergency Services Database in accordance with the following:

### 12.6.1 Technical Requirements

- 12.6.1.1 USWC shall offer AT&T a data link to the ALI/DMS database or permit AT&T to provide its own data link to the ALI/DMS database. USWC shall provide error reports from the ALI/DMS data base to AT&T immediately after AT&T inputs information into the ALI/DMS data base. Alternately, AT&T may utilize USWC to enter customer information into the data base on a demand basis and to validate customer information on a demand basis.
- 12.6.1.2 The ALI/DMS database shall contain the following customer information:

Name:

Address;

# Telephone number; and

Other information as appropriate (e.g., whether a customer is blind or deaf, or has another disability).

- 12.6.1.3 When USWC is responsible for administering the ALI/DMS database in its entirety, ported number NXXs entries for the ported numbers should be maintained (unless AT&T requests otherwise) and shall be updated if AT&T requests.
- 12.6.1.4 When Remote Call Forwarding (RCF) is used to provide number portability to the local customer and a remark or other appropriate field information is available in the database, the shadow or "forwarded-to" number and an indication that the number is ported shall be added to the customer record.
- 12.6.1.5

  If USWC is responsible for configuring PSAP features (for cases when the PSAP (or USWC) supports an ISDN interface), USWC shall ensure that CLASS Automatic Recall (Call Return) is not used to call back to the ported number.

## 12.6.2 Interface Requirements

The interface between the E911 Switch or Tandem and the ALI/DMS database for AT&T customers shall meet industry standards.

- 12.7 SCPs/Databases shall meet or exceed all of the requirements for SCPs/Databases set forth in the following technical references:
  - 12.7.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, ISSUE 1 (Bellcore, December 199).
  - 12.7.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP). (Bellcore, March 1994).
  - 12.7.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995).
  - 12.7.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1

(Belicore, October 1995) (Replaces TR-NWT-001149).

- 12.7.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995).
- 12.7.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995).
- 12.7.7 BOC Notes on USWC Networks, SR-TSV-002275, ISSUE 2, (Bellcore, April 1994).

# 12.8 Advanced Intelligent Network (AIN) Database

- 12.8.1 Access to Advanced Intelligent Network (AIN) functions is available only through the STP. USWC is required to provide all AIN features and is prohibited from selectively blocking AT&T from access to certain AIN features.
- 12.8.2 USWC will provide access to Service Management Systems (SMS) through its Service Creation Environment (SCE) on an equivalent basis as USWC provides to itself. SMS allows AT&T to create modify, or update information in call related databases. Currently, the SCE process is predominantly manual.
- AT&T shall have the right to obtain access to, and to use, USWC's service applications in the USWC SMS in addition to AT&T's own service applications that AT&T deploys via the USWC SMS to the USWC SCP (via the USWC STP), as required below. AT&T may use and access such service applications either through AT&T Local Switch(es) to the USWC AIN SCP (via the USWC STP) via interconnection of the USWC SS7 and AT&T SS7 networks or through its purchase of unbundled elements, including local switching, from USWC. When AT&T obtains access to USWC's service applications using an AT&T switch, this interconnection arrangement shall result in the USWC AIN SCP recognizing the AT&T Local Switch as at least at parity with USWC's Local Switch in terms of interfaces, performance and capabilities. When AT&T obtains access to USWC's service applications using a USWC switch, this interconnection arrangement shall result in the USWC AIN SCP recognizing the USWC switch as a least at parity.
- 12.8.3.2 USWC STPs shall maintain global title translations necessary to direct AIN queries for select global title address and translation type values to the

#### AT&T SS7 network.

- 12.8.3.3 Requirements for billing and recording information to track AIN query-response usage shall be consistent with the Connectivity Billing and Recording requirements specified in Attachment 7 (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 12.8.3.4 USWC shall provide AT&T all necessary testing resources and staff to perform service certification testing prior to service deployment in accordance with the Cooperative Testing section of this Agreement.
- 12.8.3.5 When AT&T selects SS7 AIN Access, USWC will provide an interface to the USWC STP provisioning process to provision USWC's STP global title translation data.
- 12.8.3.6 When AT&T selects SS7 AlN Access, USWC will provide interconnection of AT&T's SS7 network with the USWC SS7 network for exchange of AlN TCAP messages as described in Section 10.2.10.15.2
- 12.8.3.7 STPs shall offer SS7 AIN Access in accordance with the requirements of the following technical references:
  - 12.8.3.7.1 GR-2863-CORE, CCS Network Interface Specification Supporting Advanced Intelligent Network (AIN); and
  - 12.8.3.7.2 GR-2902-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll-Free Service Using Advanced Intelligent Network (AIN).

## 13. Tandem Switching

#### 13.1 Definition

Tandem Switching is the function that establishes a communications path between two switching offices through a third switching office (the tandem switch).

#### 13.2 **Technical Requirements**

13.2.1	Tandem Switching shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90. The requirements for Tandem Switching include, but are not limited to the following:
13.2.1.1	Tandem Switching shall provide signaling to establish a tandem connection.
13.2.1.2	Tandem Switching shall provide screening and routing as designated by AT&T.
13.2.1.3	Tandem Switching shall provide recording of all billable events designated by AT&T.
13.2.1.4	Tandem Switching shall provide Advanced Intelligent Network triggers supporting AIN features.
13.2.1.5	Tandem Switching shall provide connectivity to Operator Systems as designated by AT&T.
13.2.1.6	Tandem Switching shall provide access to Toll Free number portability database as designated by AT&T
13.2.1.7	Tandem Switching shall provide all trunk interconnections discussed under the "Network Interconnection" appendix to this Attachment (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911)).
13.2.1.8	Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911.
13.2.1.9	Tandem Switching shall provide connectivity to transit traffic to and from other carriers.
13.2.2	Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IECs, ICOs, CAPs and CLEC switches.
13.2.3	Tandem Switching shall provide local tandeming functionality between two

end offices, including two offices belonging to different CLEC's (e.g.,

Tandem Switching shall preserve CLASS/LASS features and Caller ID as

between an AT&T end office and the end office of another CLEC).

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13.2.4

- traffic is processed. Additional signaling information and requirements are provided in Section 11.
- 13.2.5 Tandem Switching shall record billable events and send them to the area billing centers designated by AT&T. Billing requirements are specified in Attachment 7 of this Agreement.
- 13.2.6 USWC shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its interconnections. When requested by AT&T, the results and reports of the testing shall be made immediately available to AT&T.
- 13.2.7 USWC shall maintain AT&T's trunks and interconnections associated with Tandem Switching at least at parity to its own trunks and interconnections.
- 13.2.8 When requested by AT&T, USWC shall provide performance data regarding traffic characteristics or other measurable elements for AT&T review.
- Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on AT&T traffic shall be at parity with controls being provided or imposed on USWC traffic (e.g., USWC shall not block AT&T traffic and leave its traffic unaffected or less affected).
- Tandem Switching shall route calls to USWC or AT&T endpoints or platforms (e.g., operator services and PSAPs) on a per call basis as designated by AT&T. Detailed primary and overflow routing plans for all interfaces available within the USWC switching network shall be mutually agreed to by AT&T and USWC. Such plans shall meet AT&T requirements for routing calls through the local network.
- 13.2.11 Tandem Switching shall process originating toll-free traffic received from an AT&T local switch.
- 13.2.12 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.
- 13.2.13 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements

### in this Agreement.

## 13.3 Interface Requirements

- 13.3.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.
- 13.3.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which USWC interconnects.
- 13.3.3 USWC shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
- Tandem Switching shall interconnect with AT&T's switch, using two-way trunks, for traffic that is transiting via the USWC network to interLATA or intraLATA carriers. At AT&T's request, Tandem Switching shall record and keep records of traffic for billing.
- 13.3.5 At AT&T's request, Tandem Switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology that AT&T designates.
- 13.3.6 Tandem Switching shall adhere to the Trunk Interface Requirements provided in the "Network Interconnection" appendix.
- 13.4 Tandem Switching shall meet or exceed (i.e., be provided more favorably than described in) each of the requirements for Tandem Switching set forth in the following technical references:
  - 13.4.1 Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90;
  - 13.4.2 GR-905-CORE covering CCSNIS;
  - 13.4.3 GR-1429-CORE for call management features; and
  - 13.4.4 GR-2863-CORE and GR-2902-CORE covering CCS AIN interconnection.

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# 14. Additional Requirements

This Section 14 of Attachment 3 sets forth the additional requirements for unbundled Network Elements which USWC agrees to offer to AT&T under this Agreement.

### 14.1 Cooperative Testing

## 14.1.1 Definition

Cooperative Testing means that USWC shall cooperate with AT&T upon request or as needed to: (a) ensure that the Network Elements and Ancillary Functions and additional requirements being provided to AT&T by USWC are in compliance with the requirements of this Agreement; (b) test the overall functionality of various Network Elements and Ancillary Functions provided by USWC to AT&T in combination with each other or in combination with other equipment and facilities provided by AT&T or third parties; and (c) ensure that all operational interfaces and processes are in place and functioning properly and efficiently (i) for the provisioning and maintenance of Network Elements and Ancillary Functions, and (ii) so that all appropriate billing data can be provided to AT&T.

# 14.1.2 Requirements

Within sixty (60) days of the Effective Date of this Agreement, AT&T and USWC will agree upon a process to resolve technical issues relating to interconnection of AT&T's network to USWC's network, Network Elements and Ancillary Functions. The agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each company's management. If AT&T and USWC do not reach agreement on such a process within sixty (60) days, any issues that have not been resolved by the parties with respect to such process shall be submitted to the ADR procedures set forth in Section 11 of this Agreement (unless both parties agree to extend the time to reach agreement on such issues).

- 14.1.2.1 USWC shall provide AT&T, for testing purposes, access at any interface between a USWC Network Element or Combination and AT&T equipment or facilities. Such test access shall be sufficient to ensure that the applicable requirements can be tested by AT&T. This access shall be available seven (7) days per week, twenty-four (24) hours per day.
- 14.1.2.2 AT&T may test any interfaces, Network Elements or Ancillary Functions and additional requirements provided by USWC pursuant to this Agreement.

- 14.1.2.3 USWC shall provide engineering data as requested by AT&T for the loop components, as set forth in Sections 2, 3, 4 and 5 of this Attachment, which AT&T may desire to test. Such data shall include equipment engineering and cable specifications, signaling and transmission path data.
- 14.1.2.4 Upon AT&T's request, USWC shall provide AT&T any office records, central office layout and design records and drawings, system engineering and other applicable documentation pertaining to a Network Element or Ancillary Function or the underlying equipment that is then providing a Network Element or Ancillary Function to AT&T.
- 14.1.2.5 USWC shall provide AT&T upon request any applicable test results from USWC testing activities on a Network Element, Ancillary Function, Additional Requirement or the underlying equipment providing AT&T a Network Element, Ancillary Function or Additional Requirement. AT&T may review such testing results and may ask USWC to rectify any deficiencies that are detected.
- 14.1.2.6 USWC shall temporarily provision selected Local Switching features for testing. Within sixty (60) days of the Effective Date of this Agreement, AT&T and USWC shall mutually agree on the procedures to be established between USWC and AT&T to expedite such provisioning processes for feature testing.
- 14.1.2.7 Upon AT&T's request, USWC shall provide technical staff to meet with AT&T representatives to provide required support for Cooperative Testing.
- 14.1.2.8 Dedicated Transport and Loop Feeder may experience alarm conditions due to in-progress tests. USWC shall not remove such facilities from service without obtaining AT&T's prior approval.
- 14.1.2.9 USWC may conduct tests or maintenance procedures on Network Elements or Ancillary Functions (or the underlying equipment that is then providing a Network Element or Ancillary Function) that cause a service interruption or degradation if such tests and procedures are conducted at a time that is mutually acceptable to AT&T and USWC.
- 14.1.2.10 USWC shall provide AT&T a single point of contact that is available seven (7) days per week, twenty-four (24) hours per day for trouble status, sectionalization, resolution, escalation and closure. Such staff shall be adequately skilled to facilitate expeditious problem resolution.

- 14.1.2.11 USWC shall provide AT&T electronic access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.
- 14.1.2.12 USWC shall participate in Cooperative Testing upon AT&T's request to test any operational interface or process used to provide Network Elements, Ancillary Functions or services to AT&T.
- 14.1.2.13 AT&T and USWC shall endeavor to complete Cooperative Testing expeditiously.
- 14.1.2.14 During Cooperative Testing, USWC provisioning processes shall be enhanced to deliver AT&T Network Elements, Ancillary Functions and any Additional Requirements in shorter intervals than during subsequent normal service periods.
- 14.1.2.15 USWC shall participate in Cooperative Testing whenever it is deemed necessary by AT&T to ensure service performance, reliability and customer serviceability.
- 14.1.2.16 AT&T may accept or reject the Network Element ordered by AT&T if upon completion of cooperative acceptance testing, the tested Network Element does not meet the requirements stated herein.

#### 14.2 Performance

## 14.2.1 Scope

This section addresses performance requirements for Network Elements and Ancillary Functions to provide local service. It includes requirements for the reliability and availability of Network Elements and Ancillary Functions, and quality parameters such as transmission quality (analog and digital) and speed (or delay). In addition, an overview of service performance requirements is given.

- 14.2.1.1 The General Performance Requirements in this section apply to all aspects of Network Elements and Ancillary Functions. Additional requirements are given in this performance section and in the individual Network Elements sections.
- 14.2.1.2 USWC shall work cooperatively with AT&T to determine appropriate performance allocations across Network Elements.

- 14.2.2 USWC shall provide real-time, remote data access to performance monitoring and alarm data on events affecting (or potentially affecting)

  AT&T's traffic.
- 14.2.3 USWC shall provide performance equal to or better than all of the requirements set forth in the following technical references:

#### 14.2.3.1 Bell Communications Research, Inc. Documents

- 14.2.3.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR).

  This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve customers' lines. Some modules of the LSSGR are also referenced separately in this document.
- 14.2.3.1.2 TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements.
- 14.2.3.1.3 TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems.
- 14.2.3.1.4 TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems.
- 14.2.3.1.5 TR-NWT-000507, Issue 5, December 1993, LSSGR Transmission, Section 7.
- 14.2.3.1.6 GR-303-CORE, Issue 1, September 1995, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.
- 14.2.3.1.7 GR-334-CORE, Issue 1, June 1994, Switched Access Service: Transmission Parameter Limits and Interface Combinations.
- 14.2.3.1.8 TR-NWT-000335, Issue 3, May 1993, Voice Grade Special Access Services Transmission Parameter Limits and Interface Combinations.
- 14.2.3.1.9 TR-TSY-000529, Issue 2, July 1987, Public Safety LSSGR.
- 14.2.3.1.10 GR-1158-CORE, Issue 2, October 1995, OSSGR Section 22.3: Line

#### Information Database.

- 14.2.3.1.11 TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).
- 14.2.3.1.12 TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 14.2.3.1.13 TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems.
- 14.2.3.1.14 TR-NWT-000505, Issue 3 , May 1991, LSSGR Section 5, Call Processing.
- 14.2.3.1.15 FR-NWT-000271, 1993, Operator Services Systems Generic Requirements (OSSGR).
- 14.2.3.1.16 TR-NWT-001156, Issue 2, July 1993, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.
- 14.2.3.1.17 SR-TSY-001171, Issue 1, January 1989, Methods and Procedures for System Reliability Analysis.
- 14.2.3.1.18 Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.

## 14.2.3.2 ANSI Standards

- 14.2.3.2.1 ANSI T1.512-1994, Network Performance Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.
- 14.2.3.2.2 ANSI T1.506-1990, Network Performance Transmission Specifications for Switched Exchange Access Network.
- 14.2.3.2.3 ANSI T1.508-1992, Telecommunications Network Performance Loss Plan for Evolving Digital Networks. Also supplement T1.508a-1993.
- 14.2.3.2.4 ANSI T1.101-1994, Digital Synchronization Network Plan.

## 14.2.3.3 TIA/EIA Standards

- 14.2.3.3.1 Requirements not specifically addressed here shall be found in the documents listed in Electronic Industries Association/Telecommunications Industries Association Standards and Engineering Publications.
- 14.2.3.3.2 TIA/EIA TSB-37A, Telephone Network Transmission Model for Evaluating Modem Performance.
- 14.2.3.3.3 TIA/EIA TSB-38, Test Procedure for Evaluation of 2-wire 4 kHz Voiceband Duplex Modems.

#### 14.2.3.4 IEEE Standards

- 14.2.3.4.1 IEEE Standard 743-1984, IEEE Standard Methods and Equipment for Measuring Transmission Characteristics of Analog Voice Frequency Circuits.
- 14.2.3.4.2 ANSI/IEEE Standard 820-1984, Telephone Loop Performance Characteristics.

#### 14.2.3.5 AT&T Standards

- 14.2.3.5.1 Outside Plant Engineering Handbook, August 1994.
- 14.2.3.5.2 AT&T Pub. 60220, Issue 1, April 1991, 5ESS OSPS Interface Technical Specification for Domestic Toll And Assistance Applications.
- 14.2.3.5.3 AT&T Technical Reference TR 43202, May 1985, AT&T Analog Voice Total and Coordinated Services.
- 14.2.3.5.4 AT&T Technical Reference TR 41458, April 1990, Special Access Connection to the AT&T Network.
- 14.2.3.5.5 AT&T Technical Reference TR 62415, June 1989, Access Specification For High Capacity (DS1/DS3) Dedicated Digital Service. Also TR 62415A2 November 1990, and TR 62415A3 July 1992 which are addenda to TR 62415.

- 14.2.3.5.6 AT&T Technical Reference TR 54016, September 1989, Requirements For Interfacing Digital Terminal Equipment To Services Employing The Extended Superframe Format.
- 14.2.3.5.7 AT&T Technical Reference TR 62411, December 1990, ACCUNET T1.5 Service Description And Interface Specification. Also Addendum 1 March 1991 and Addendum 2 October 1992.
- 14.2.3.5.8 AT&T Technical Reference TR 62421, December 1989, ACCUNET Spectrum of Digital Services Description And Interface Specification. Also TR 62421A Addendum 2 November 1992.
- 14.2.3.5.9 AT&T Data Communications Technical Reference TR 62310, August 1993, DS0 Digital Local Channel Description And Interface Specification. Also Addendum 2 November 1992.
- 14.2.3.5.10 AT&T Technical Reference TR 54014, 1992, ACCUNET T45 and T45 Reserved Services Service Description And Interface Specification.
- 14.2.3.4.11 AT&T Technical Reference TR 54018, most current issue, ACCUNET T155 Service Description And Interface Specification.

#### 14.2.4 Services and Capabilities

- 14.2.4.1 All Network Elements shall provide performance sufficient, in combination with other Network Elements, to provide the following applications in accordance with the requirements of this document:
  - (a) All types of voice services;
  - (b) All types of voice-band data modem connections up to and including 28.8 kbps V.34;
  - (c) All types of FAX transmissions up to and including 14.4 kbps group 3;
  - (d) All CLASS/LASS features; and
  - (e) All Operator Systems.
- 14.2.4.2 The following capabilities shall be provided as applicable:

- (a) ISDN BRI;
- (b) ISDN PRI;
- (c) Switched Digital Data;
- (d) Non-Switched Digital Data;
- (e) Any types of Video applications that a customer may order;
- (f) Any Coin Services the customer may order,
- (g) Frame Relay and ATM; and
- (h) Private Line Services.
- 14.2.5 Specific Performance Requirements for Network Elements and Ancillary Functions
- 14.2.5.1 The following sections itemize performance parameters for Network Elements and Ancillary Functions. USWC shall provide performance equal to or better than all of the requirements set forth in this Section. Unless noted otherwise, requirements and objectives are given in terms of specific limits. This means that to satisfy a requirement all tests (acceptance and ongoing performance) must meet the specific limit(s)
- 14.2.5.2 Performance Allocation
- 14.2.5.2.1 Transmission path impairments may be classified as either analog or digital, and will depend on the nature of the signal transmitted across the Network Element. Analog impairments are introduced on any analog portion of the loop, typically between the NID portion of Loop Distribution and the analog-to-digital (A/D) conversion, and are usually correlated with the length of the physical plant. Digital impairments are introduced by A/D conversion and by interfaces between digital Network Elements. In addition, noise can be introduced by either analog transmission or the A/D conversion.
- 14.2.5.3 Loop Combination Architecture Constraints
- 14.2.5.3.1 The following constraints will limit not only the variety of Loop Combination

architectures that may be considered, but also the architectures USWC may consider to deliver any Ancillary Function or Network Element. These constraints apply to the entire path between the NID portion of Loop Distribution and the USWC switch. Any exceptions to these restrictions shall be specifically requested or approved by AT&T in writing.

- 14.2.5.3.1.1 No more than 1 A-D conversion.
- 14.2.5.3.1.2 No more than 1, 2-to-4-wire hybrid.
- 14.2.5.3.1.3 No voice compression.
- 14.2.5.3.1.4 No echo cancelers or suppressers.
- 14.2.5.3.1.5 One digital loss pad per PBX.
- 14.2.5.3.1.6 No digital gain.
- 14.2.5.3.1.7 No additional equipment that might significantly increase intermodulation distortion.

### 14.2.5.4 Transmission Impairments

The following transmission impairments are listed in TR NWT-00440.

#### 14.2.5.4.1 Analog Impairments

14.2.5.4.1.1 Analog impairments are those introduced on portions of the end-to-end circuit on which communications signals are transmitted in analog format. These portions of the transmission path would typically be between a NID and an A/D conversion, most commonly on the metallic loop. The performance on the analog portion of a circuit is typically inversely proportional to the length of that circuit.

#### 14.2.5.4.1.2 Loss

- 14.2.5.4.1.2.1 Electrical loss is measured using a 1004 Hz 0.0 dB one Milliwatt 900 ohm test tone.
- 14.2.5.4.1.2.2 Off-hook electrical loss between the NID and the switch shall be no

more than 8.0 dB for any line, and the mean value for all lines shall be 3.5 dB  $\pm$  0.5 dB. On-hook electrical loss between the NID and the switch shall be no more than 4.0 dB above the off-hook electrical loss for any line.

# 14.2.5.4.1.3 Idle Channel Circuit Noise

- 14.2.5.4.1.3.1 Idle channel circuit noise (C-message) is added by analog facilities, by the A/D conversion of signals, by digital processing equipment (e.g., echo cancelers, digital loss pads), robbed bit signaling and errors on digital facilities.
- 14.2.5.4.1.3.2 Idle channel circuit noise shall be less than or equal to 18 dBrnC.

#### 14.2.5.4.1.4 Talker Echo

- 14.2.5.4.1.4.1 The primary source of echo is improper impedance-matching at the 2-to-4 wire hybrid in the USWC network. The impact on customer perception is a function of both echo return loss and delay.
- 14.2.5.4.1.4.2 Echo Return Loss (ERL) shall be greater than 26 dB to a standard termination (900 ohms, 2.16  $\mu$ Fd) and greater than 14 dB to a telephone set off-hook. Singing Return Loss (SRL) shall be greater than 21dB to a standard termination and greater than 11 dB to a telephone set off-hook.

#### 14.2.5.4.1.5 Listener Echo

Listener echo is a double reflection of a transmitted signal at two different impedance mismatches in the end-to-end connection. While in extreme cases it can degrade voice transmission performance, listener echo is primarily an issue for voiceband data. The requirements on Talker Echo shall apply to Listener Echo.

### 14.2.5.4.1.6 Propagation and Processing Delay

14.2.5.4.1.6.1 Propagation delay is the delay involved in transmitting information from one location to another. It is caused by processing delays of equipment in the network and delays associated with traveling across transmission facilities.

14.2.5.4.1.6.2 USWC shall cooperate with AT&T to limit total service propagation and processing delay to levels at parity with that within the USWC local network.

## 14.2.5.4.1.7 Signal-to-Noise Ratio

- 14.2.5.4.1.7.1 The Signal-to-Noise Ratio (S/N) is a critical parameter in determining voiceband data performance. It is typically measured with a 1004 Hz tone.
- 14.2.5.4.1.7.2 USWC must provide on the Loop Combination a signal-to-noise ratio of at least 37 dB between the NID and the end office.

## 14.2.5.4.1.8 C-Notched Noise

The requirements for Signal-to-Noise Ration shall apply to C-Notched Noise.

#### 14.2.5.4.1.9 Attenuation Distortion

- 14.2.5.4.1.9.1 Attenuation distortion, also known as frequency distortion or gain slope, measures the variations in loss at different frequencies across the voice frequency spectrum (200 Hz 3400 Hz). It is measured by subtracting the loss at 1004 Hz from the loss at the frequency of interest.
- Attenuation distortion from the NID to the switch shall be within the range ± 0.5 dB for frequencies between 304 and 3004 Hz. From the switch to NID attenuation distortion shall be within the range ± 0.5 dB for frequencies between 204 Hz and 3004 Hz. In addition, attenuation distortion shall remain within the range +1 dB/-3 dB for frequencies between 200 Hz and 3500 Hz.

#### 14.2.5.4.1.10 Envelope Delay Distortion

- 14.2.5.4.1.10.1 Envelope Delay Distortion (EDD) measures the difference in transit time of signals at different frequencies. EDD is measured relative to the transit time of a 1704 Hz tone, and is given in microseconds. EDD is used as an approximation of the group delay of the channel.
- 14.2.5.4.1.10.2 EDD shall be: 1704 Hz to 604 Hz  $\le 350~\mu \text{sec.}$ ; 1704 Hz to 2804 Hz

- ≤195  $\mu$ sec.; 1704 Hz to 204 Hz - ≤580  $\mu$ sec.; 1704 Hz to 3404 Hz - ≤400  $\mu$ sec.

## 14.2.5.4.1.11 Phase Jitter

- 14.2.5.4.1.11.1 Phase jitter measures the unwanted angular modulation of a signal. It is caused by noise or the actual modulation of the signal by another unwanted signal. It displaces the zero crossings of a signal. It is measured in terms of peak-to-peak deviations of a 1004 Hz tone from its nominal zero crossings, and in a particular frequency band (20-300 Hz and either 4-300 Hz or 2-300 Hz). Phase jitter impacts voiceband data performance and can make modems more susceptible to other impairments, including noise.
- 14.2.5.4.1.11.2 From the NID to the interexchange carrier point of termination, phase jitter shall be <1.5 ° point-to-point in the 20-300 Hz band, and <1.8° point-to-point in the 4-300 Hz. band.

#### 14.2.5.4.1.12 Amplitude Jitter

- 14.2.5.4.1.2.12.1 Amplitude jitter is any deviation of the peak value of a 1004 Hz signal from its nominal value. Excessive amounts can impair voiceband data performance. It is primarily caused by noise, but can also be caused by phase jitter, gain hits or single frequency interference.
- 14.2.5.4.1.2.12.2 In NID-interexchange carrier point of termination, ≤2.5% of amplitude jitter is permitted in the 20-300 Hz band and ≤2.9% in the 4-300 Hz band.

#### 14.2.5.4.1.13 Intermodulation Distortion

- 14.2.5.4.1.13.1 Intermodulation distortion (IMD) measures non-linear distortions of a signal. It compares the power of harmonic tones to the power of the transmitted tones. It is measured for both the 2nd and 3rd harmonics of the transmitted tones. IMD is caused by compression or clipping and can impair voiceband data performance.
- 14.2.5.4.1.13.2 Both 2nd and 3rd order IMD between the NID and end office must be ≥52 dB.

## 14.2.5.4.1.14 Impulse Noise

- 14.2.5.4.1.14.1 Impulse noise is a sudden and large increase in noise on a channel for a short duration of time. Impulse noise is measured as a count of the number of times a noise threshold is exceeded during a given time period (typically 5 or 15 minutes). It is caused by protection switching, maintenance activities, electromechanical switching systems, digital transmission errors and line coding mismatches. Impulse noise sounds like clicking noises or static on voice connections. Impulse noise impairs voiceband data performance.
- The NID to interexchange carrier point of termination portions of connections shall introduce no impulse noise events within 6 dB of the received signal power on 93% of all 15 minute connections. In addition, there shall be no more than 1 impulse noise event within 6 dB of the received signal power during any 30-minute period.

#### 14.2.5.4.1.15 Phase Hits

- 14.2.5.4.1.15.1 Phase hits are sudden changes in the phase of a signal lasting at least 4  $\mu$ sec. Phase hits are measured using a threshold which indicates how much the phase of the signal has changed with respect to its nominal phase. Phase hits are caused by protection switching and slips, or other synchronization errors. Phase hits can impair voiceband data performance.
- 14.2.5.4:1.15.2 Between the NID and interexchange carrier point of termination, 99.75% of all 15-minute connections shall have no phase hits exceeding 10°. In addition, there shall be no more than 1 phase hit exceeding 10° in any 30-minute period.

#### 14.2.5.4.1.16 Gain Hits

- 14.2.5.4.1.16.1 Gain hits are sudden changes in the level of a signal that last at least 4  $\mu$ sec. Gain hits are measured against a threshold of typically 2-5 dB relative to the signal's nominal level. Gain hits are usually caused by protection switches and can impair voiceband data performance.
- 14.2.5.4.1.16.2 Between the NID and the interexchange carrier point of termination, 99.5% of all 15-minute connections shall have no gain hits exceeding

3 dB. In addition, there shall be no more than 1 gain hit exceeding 3 dB in any 30-minute period.

## 14,2.5.4.1.17 Dropouts

- 14.2.5.4.1.17.1 Dropouts are drops in the level of a signal of 12 dB or more for at least 4  $\mu$ sec. They are caused by protection switching events, radio fading and conditions causing digital carrier systems to lose frame. Dropouts are critical for voiceband data performance but, if severe enough, will also affect voice quality.
- 14.2.5.4.1.17.2 Between the NID and the interexchange carrier point of termination, 99.9% of all 15-minute connections shall have no dropouts and in addition, no connection shall suffer more than 1 dropout in any 60-minute period.

## 14.2.5.4.1.18 Frequency Shift

- 14.2.5.4.1.18.1 Frequency shift measures any frequency changes that occur when a signal is transmitted across a channel. It is typically measured using a 1004 Hz tone. Frequency shift has very little impact on voice or voiceband data performance; however, round-trip frequency shifts can affect the ability of echo cancelers to remain converged.
- 14.2.5.4.1.18.2 No more than 0.2 Hz frequency shift shall be on any connection. In addition, 99.5% of all calls shall have frequency shift < 0.1 Hz.

#### 14.2.5.4.1.19 Crosstalk

- 14.2.5.4.1.19.1 Crosstalk is the presence of signals from other telephone connections on a circuit. Crosstalk can be either intelligible, when speech from other connections can be heard and understood, or unintelligible. Crosstalk is caused by inter-channel interference on the transmission system. Crosstalk is difficult to measure: it requires correlating signals on different circuits or using human listeners to identify its presence. Trouble reports may be used to estimate the probability of crosstalk.
- 14.2.5.4.1.19.2 Ninety-nine percent (99%) of Loop Combinations shall have probability ≤0.1% of experiencing crosstalk exceeding -65 dBm0.

## 14.2.5.4.1.20 Clipping

14.2.5.4.1.20.1 Clipping occurs when part of a transmitted signal is dropped and does not reach the receiving portion on a connection. It can be caused by Digital Speech Interpolation (DSI) equipment used in Digital Circuit Multiplication Systems (DCMS), which increase the amount of traffic that transmission facilities carry, and by echo cancelers or echo suppressers.

14.2.5.4.1.20.2 No clipping incidents shall occur on any call.

## 14.2.5.4.2 Digital Impairments

Digital impairments occur in the signal wherever it is transmitted in digital format. These errors are usually introduced upon conversion of the signal from analog to digital, as well as at interfaces between digital components. While many digital impairments have little impact on subjective voice quality, they can impact voiceband data performance.

### 14.2.5.4.2.1 Signal Correlated Distortion

14.2.5.4.2.1.1 Signal correlated distortion (SCD) is unwanted noise or distortion introduced into a signal through the conversion of a signal from analog to digital format, or through digital processing that changes the transmitted signal. SCD affects performance when a sign is being transmitted. The primary sources of SCD are signal encoders, echo cancelers, digital loss pads and robbed bit signaling. SCD affects both voice and voiceband data performance.

- 14.2.5.4.2.1.2 The NID-to-end-office connection shall allow:
- 14.2.5.4.2.1.2.1 A maximum of 1 A/D conversion, using 64 Kbps  $\mu$ -law ( $\mu$ =255) PCM;

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- 14.2.5.4.2.1.2.2 No voice compression;
- 14.2.5.4.2.1.2.3 No echo cancellation; and
- 14.2.5.4.2.1.2.3 Robbed bit signaling only if SS7 or ISDN are not used.
- 14.2.5.4.2.2 Slips

- Slips occur when a frame of digital data is either deleted or repeated because of differences in the clocks used to synchronize digital facilities. Slips sound like clicks or pops on voice calls and have a major impact on voiceband data performance.
- 14.2.5.4.2.2.2 The NID-to-interexchange carrier point of termination portion of connections shall have fewer than 0.45 slips every twenty-four (24) hours on average.

# 14.2.5.4.2.3 Digital Timing Jitter and Wander

- Digital timing jitter is the unwanted phase modulation of digital signals at rates above 10 Hz. Wander is the unwanted phase modulation of digital signals at rates below 10 Hz. Digital timing jitter is caused by imperfections in the timing recovery process of repeaters and the stuffing synchronization process used by multiplexers/demultiplexers. Wander is caused by slowly varying changes in digital signal phase due to clock frequency offset and drift, changes in propagation delay of terrestrial facilities due to temperature changes and changes in the distance of satellites from the earth. These events have a major impact on voiceband data performance.
- 14.2.5.4.2.3.2 The maximum digital timing jitter allowed in the 10 Hz to 8 kHz frequency band at any network interface or any terminal equipment in the network is 5 Unit Intervals (UI). The maximum digital timing jitter allowed in the 8 kHz to 40 kHz frequency band is 0.1 UI. The objective for wander is less than 28 UI at any network interface or terminal equipment.

#### 14.2.5.4.2.4 DS-1 Errored Seconds

- 14.2.5.4.2.4.1 An Errored Second (ES) on a DS-1 facility is any second during which at least 1 bit is in error. The impact of an ES on performance depends on the number of errors that occur during a second. Typically, voice performance is not significantly impacted by ES, but it can cause errors in voiceband data transmissions.
- 14.2.4.5.4.2.4.2 Each USWC network shall have less than 20 ESs per twenty-four (24) hour period.

# 14.2.4.5.4.2.5 DS-1 Severely Errored Seconds

14.2.5.4.2.5.1

A severely Errored Second (SES) is any second during which a DS-1 has an error rate exceeding 0.001. An SES can be caused by a loss of framing, a slip or a protection switch. SESs impact both voice and voiceband data performance. For voice, an SES will sound like a burst of noise or static. SESs that occur during a voiceband data transmission cause a significant burst of errors and can cause modems to retrain.

14.2.5.4.2.5.2 The digital portion of each NID to POP connection shall have less than 2 SESs per twenty-four (24) hour period.

#### 14.2.5.4.2.6 Short Failure Events

A Short Failure Event (SFE) is a Loss of Frame (LOF) event of less than two minutes' duration. A LOF event is declared when, on detection of a Loss of Signal (LOS) or Out-of-Frame (OOF), a rise-slope-type integration process starts that declares a LOF after 2.5±0.5 sec. of continuous LOS or OOF. If the LOS or OOF is intermittent, the integration process shall decay at a slope of 1/5 the rise slope during the period when the signal is normal. Thus, if the ratio of a LOS or OOF to a normal signal is greater than 1/2, a LOF will be declared. A LOS condition shall be declared when the Network Channel Terminating Equipment has determined that 175±75 successive pulse positions with no pulses of either positive or negative polarity have occurred. An OOF condition shall be declared when either Network equipment or Digital Terminal Equipment detects errors in the framing pattern.

14.2.5.4.2.6.2 There shall be fewer than 1 SFE per month.

# 14.2.5.5 Service Availability and Reliability

Availability refers to the time period during which the service is up and usable for its intended purpose. Reliability refers to the probability that a task will be completed successfully, given that it has been successfully begun.

# 14.2.5.5.1 Blocked Calls

- 14.2.5.5.1.1 Blocking is the fraction of call origination attempts denied service during a stated measurement period. Blocking occurs because of competition for limited resources within the network.
- 14.2.5.5.1.2 For intraLATA toll service as well as for local exchange service, the blocking level from originating network interface (NID) to terminating NID shall not exceed 1% in any hour, except under conditions of service disruption. For access to or egress from the AT&T long distance network, the blocking rate shall not exceed 0.5% in any hour, except under conditions of service disruption.
- 14.2.5.5.2 Blocked Dial Tone
- 14.2.5.5.2.1 Blocked dial tone occurs when the subscriber does not receive dial tone within 3 seconds of going off-hook.
- 14.2.5.5.2.2 Customers shall not experience more than 0.1% dial tone blocking during average busy season busy hour (ABSBH).

#### 14.2.5.5.3 Downtime

Downtime is the period of time that a system is in a failed state.

- 14.2.5.5.3.1 The average downtime for all subscriber Loop Combinations shall be less than 49 minutes per year. The maximum downtime for 99% of all subscriber Loop Combinations shall be less than 74 minutes per year.
- 14.2.5.5.3.2 The average downtime for an end office switch shall be less than 3 minutes per year. The average downtime for individual trunks shall be less than 28 minutes per year. The average downtime for digital trunk groups shall be less than 20 minutes per year. The average downtime for an individual line appearance at the switch shall be less than 28 minutes per year. The average downtime for a Remote Terminal (RT) shall be less than 17 minutes per year. The average downtime for an individual line on a Remote Terminal (RT) shall be less than 13 minutes per year.
- 14.2.5.5.3.3 The mean time to repair (MTTR) of any equipment at an attended site shall be less than 3 hours. The mean time to repair (MTTR) of any equipment at an unattended site shall be less than 4 hours. Ninety-five percent of all repairs to the network interface (NID) shall be completed within twenty-four (24) hours.

- 14.2.5.5.3.4 There shall be no downtime due to power failures at the switch.
- 14.2.5.5.3.5 The probability of a stable call being cut off shall be less than 20 cutoffs per one million one (1) minute calls.
- 14.2.5.5.3.6 The rate of ineffective machine attempts at the end office shall be less than 0.0005 (5 failures per 10,000 call attempts).
- 14.2.5.5.3.7 USWC shall meet all requirements for private line services in TR-NWT-000335, ANSI T1.512-1994, and AT&T Technical References as listed in this Section 14.2.
- 14.2.5.5.4 Dial Tone Delay
- 14.2.5.5.4.1 Dial Tone Delay is the time period between a customer off-hook and the receipt of dial tone from an originating end office. Dial Tone Delay has a significant effect on customer opinion of service quality.
- 14.2.5.5.4.2 The average dial tone delay shall not exceed 0.6 seconds. At most, 0.5% of calls during the average-season busy hour (ABSBH) shall experience dial tone delay greater than 3 seconds. At most, 8% of calls during the ten-high-day busy hour (THDBH) shall experience dialtone delay greater than 3 seconds. At most, 10% of calls during the high-day busy hour (HDBH) shall experience dial tone delay greater than 3 seconds.
- 14.2.5.5.5 Dial Tone Removal
- 14.2.5.5.5.1 Dial tone removal is the time between recognition of the first address digit to the removal of dial tone on the line.
- 14.2.5.5.5.2 The maximum dial tone removal interval shall be ≤500 milliseconds.
- 14.2.5.5.6 **Post Dial Delay**
- 14.2.5.5.6.1 Post Dial Delay (PDD) is the amount of time a caller must wait after entering or dialing the last digit of a Destination Telephone Number (DTN) before hearing a valid audible network response. The PDD for an end user is measured from the time the caller has pressed or dialed the last digit of a DTN until receipt of an audible network response.

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14.2.5.5.6.2 The requirements given reflect an end-to-end CCS7 protocol for AT&T end users. Where a mixture of CCS7 and inband (MF) signaling protocols are employed, an increase in the PDD can be expected.

# 14.2.5.5.6.2.1 PDD 1 - A - Intra AT&T LSO

- 14.2.5.5.6.2.1.1 Intra-LSO calls do not employ external signaling protocols. The PDD for intra-LSO call flows are dependent upon the processor cycle time and traffic load conditions. This PDD is assumed to be between customers on the same AT&T LSO, between the Remote Switch Modules (RSMs) on the same Host, or between an RSM and 5ESS Host customers.
- 14.2.5.5.6.2.1.2 The objective for intra-LSO PDD is less than 310 milliseconds for 50% of all calls and less than 460 milliseconds for 95% of all calls.

# 14.2.5.5.6.2.2 PDD1 - B - AT&T LSO to Another AT&T Local LSO

- The signaling protocols from an AT&T LSO to another AT&T LSO are assumed to employ out-of-band Common Channel Signaling System 7 (CCS7) format. Local calls, that is, calls from an AT&T LSO to another AT&T LSOs are assumed to have no more than one pair of Signaling Transfer Point Switches (STPSs) and no more than one data base dip.
- 14.2.5.5.6.2.2.2 This PDD is expected to be better than the AT&T Long Distance objective with an average PDD of ≤ .870 seconds, with 95% ≤ 1.34 seconds.

# 14.2.5.5.6.2.3 PDD1 - C - AT&T LSO to Other LSO

- 14.2.5.5.6.2.3.1 Calls from an AT&T LSO to other LSOs are dependent upon the interface agreements between AT&T and the LSO service provider and may employ CCS7, inband (MF) or a combination of both protocols.
- 14.2.5.5.6.2.3.2 Calls from an AT&T LSO to another LSO via the Public Switched Telecommunications Network (PSTN), using end-to-end CCS7 signaling protocols, can expect to meet the AT&T PDD objective average of 2.0 seconds, with 95% in ≤2.5 seconds. Calls from an

AT&T LSO via the PSTN to LSOs outside the local service area are assumed to use CCS7 signaling protocols to the AT&T #4ESS.™ The egress signaling protocols from the AT&T Switched Network (SN) to the many different local telephone company service providers, however, does not necessarily utilize CCS7 signaling. There are three basic egress signaling configuration. They are:

- (a) Network Inter-Connect, with CCS7 between AT&T and the local telephone company.
- (b) Inband Multifrequency (MF) signaling protocols without a USWC egress tandem in the connection.
- (c) Inband MF signaling protocols with a USWC egress tandem in the connection.
- 14.2.5.5.6.2.3.2.3.1 Calls from an AT&T LSO to other LSOs outside the local service area are assumed to have multiple STPSs for 1+ traffic in the access and SN portion of the connection. The egress from the SN for 1+ traffic is again dependent upon the interface agreements in that service area and may consist of CCS7 or inband MF protocols.
- 14.2.5.5.6.2.3.2.3.2 Calls from an AT&T's LSO to another AT&T LSO with a mixture of CCS7 or all inband signaling protocols are expected to receive PDDs on the average of 2.9 seconds, with 95% in ≤6.5 seconds.

#### 14.2.5.5.6.2.4 PDD2 - AT&T LSO to Operator Services

14.2.5.5.6.2.4.1 The signaling protocols between an AT&T LSO and the AT&T SN 5ESS© Operator Services Position Systems (OSPS) will employ Inband Feature Group C Modified Operator Services Multifrequency signaling format. As with 1+ traffic, the egress from the SN to the local service provider LSO is dependent upon the interface.

## 14.2.5.5.6.2.5 PDD2 - A - AT&T LSO to 5ESS@ OSPS 0 Only

14.2.5.5.6.2.5.1 When a "0" has been entered by the customer, timing is applied in the absence of a DTMF "#". If a "#" is not entered, the objective is for the timer to expire in 4 seconds +/- 1 second. After the timer has

expired, or the "#" has been entered, the average PDD shall not exceed 2.2 seconds.

# 14 2 5 5 6 2 6 PDD2 - B - 0 Plus Calls

On calls where analysis of the first 6 digits (area code + central office code) is required, the PDD shall not exceed 2.0 seconds on the average, and 2.5 seconds in 95% of all occurrences. For calls that require analysis of the 10-digits called number and the 7 digits of the calling number (e.g., ANI, Automatic Charge Quotation Service), the PDD is expected to be 4.5 seconds on the average and < 5.0 seconds in 95% of all occurrences. These delays are based on the calling customer receiving a network response as described above, specifically the calling card alerting tone from the 5ESS© OSPS. The remaining call completion PDD to the DTN, after the customer has completed the Operator Service function, will take the form of the PDDs discussed in PDD1-C.

# 14.2.5.5.6.2.7 Impact of Local Number Portability (LNP)

Local Number Portability will increase PDDs. If a call forwarding option is used as an interim solution for LNP, the delay due to additional switching in the local access is estimated to be 0.3 seconds (mean) and 0.4 seconds (95th percentile), in addition to the PDDs described earlier. These estimates assumes CCS7 signaling between LSOs. If inband signaling is used between LSOs, the PDD will be increased by 1.9 to 3.6 (1.7+1.9) seconds compared to the PDDs provided in the section on Post Dial Delay.

### 14.2.5.5.6.2.8 Custom Local Area Subscriber Services (CLASS)

CLASS<sup>SM</sup> features such as Calling Name Delivery can contribute to the PDD of a call. This delay is caused by the additional time (at USWC's option) before the ringing interval commences. This default delay is 3 seconds. Optional settings are available in one (1) second intervals from 1 to 6 seconds. Calls to DTNs that have CLASS<sup>SM</sup> features, particularly with calling name delivery, can expect to experience from 1 to 6 seconds (3 seconds default) of additional PDD compared to the PDDs shown for PDD1-C.

# 14.2.5.5.6.2.9 Partial Dial Timing

14.2.5.5.6.2.9.1 This is the interval between each information digit from a customer's line until the LSO or switching system has determined that the digit

string is incomplete.

14.2.5.5.6.2.9.2 For customer lines, partial dial timing shall be ≥16 seconds and ≤24 seconds. For trunks, inband signaling time-out shall be ≥5 seconds and ≤20 seconds.

## 14.2.5.6 Local Switching

USWC shall provide performance equal to or better than the requirements for Local Switching set forth in Bellcore LSSGR TR-TSY-000511. Post dial delay for connections to AT&T local operator services shall be no worse than Operator Services provided by USWC. Additionally, post dial delay from the Operator Services to destination numbers shall be no worse than that provided by USWC. Post dial delay for connections to AT&T local directory services shall be no worse than directory services provided by USWC. Additionally, post dial delay from the directory system to destination numbers shall be no worse than that provided by USWC. Specific requirements for the Data Switching function of Local Switching are in Section 6.3. In all cases the performance of Data Switching shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and USWC.

#### 14.2.5.7 Operator Systems

Operator System connections shall comply with the requirements for the Loop Combination, Local Switching, Operator Service and Directory Service requirements.

#### 14.2.5.8 Common Transport

Specific requirements for this Network Element or Ancillary Function are in the Common Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and USWC.

#### 14.2.5.9 Dedicated Transport

Specific requirements for this Network Element are in the Dedicated Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation

of impairments shall be negotiated between AT&T and USWC.

# 14.2.5.10 Signaling Transfer Points

Specific requirements for this Network Element are in the Signaling Transfer Points section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and USWC.

# 14.2.5.11 Signaling Link Transport

Specific requirements for this Network Element are in the Signaling Link Transport section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and USWC.

#### 14.2.5.12 SCPs/Databases

The performance requirements for databases (LNP, LIDB, E911, etc.) vary depending on the specific database and the application(s) that database supports. Database-specific performance requirements are included in the sections addressing individual Network Elements and in applicable Bellcore documents. In all cases, the query response time, availability, accuracy, updating capabilities and other performance parameters shall at least be at parity with equivalent services USWC provides to itself or other customer.

#### 14.2.5.13 Tandem Switching

Specific requirements for this Network Element are in the Tandem Switching section. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and USWC.

- 14.2.6 Test and Verification
- 14.2.6.1 USWC shall permit AT&T to confirm acceptable performance of any Network Element.
- 14.2.6.1.1 At AT&T's request, USWC will provide sufficient access to the Network Element so that AT&T can test the performance of that Network Element to

#### AT&T's satisfaction.

14.2.6.1.2 At AT&T's request, USWC will perform tests to confirm acceptable performance and provide AT&T with documentation of test procedures and results acceptable to AT&T.

# 14.3 Protection, Restoration and Disaster Recovery

# 14.3.1 Scope

This Section refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration and disaster recovery.

# 14.3.2 Requirements

- 14.3.2.1 USWC shall provide protection, restoration and disaster recovery capabilities at parity with those capabilities provided for its own services, facilities and equipment (e.g., equivalent circuit pack protection ratios, facility protection ratios).
- 14.3.2.2 USWC shall provide Network Elements and Ancillary Functions equal priority with respect to protection, restoration and disaster recovery as USWC provides its own services, facilities and equipment.
- 14.3.2.3 USWC shall provide Network Elements and Ancillary Functions equal priority with respect to the use of spare equipment and facilities as USWC provides its own services, facilities and equipment.
- 14.3.2.4 USWC shall restore Network Elements which are specific to AT&T end user customers on a priority basis as AT&T may designate.

# 14.4 Synchronization

#### 14.4.1 Definition

Synchronization is the function which keeps all digital equipment in a communications network operating at the same average frequency. With respect to digital transmission, information is coded into discrete pulses. When these pulses are transmitted through a digital communications network, all synchronous Network Elements are traceable to a stable and accurate timing source. Network

synchronization is accomplished by timing all synchronous Network Elements in the network to a stratum 1 source so that transmissions from these network points have the same average line rate.

# 14.4.2 Technical Requirements

The following requirements are applicable to the case where USWC provides synchronization to equipment that AT&T owns and operates within a USWC location. In addition, these requirements apply to synchronous equipment that is owned by USWC and is used to provide a Network Element to AT&T.

- 14.4.2.1 The synchronization of clocks within digital networks is divided into two parts: intra-building and inter-building. Within a building, a single clock is designated as the Building Integrated Timing Supply (BITS), which provides all of the DS1 and DS0 synchronization references required by other clocks in such building. This is referred to as intra-building synchronization. The BITS receives synchronization references from remotely located BITS. Synchronization of BITS between buildings is referred to as inter-building synchronization.
- To implement a network synchronization plan, clocks within digital networks are divided into four stratum levels. All clocks in strata 2, 3 and 4 are synchronized to a stratum 1 clock; that is, they are traceable to a stratum 1 clock. A traceable reference is a reference that can be traced back through some number of clocks to a stratum 1 source. Clocks in different strata are distinguished by their free running accuracy or by their stability during trouble conditions, such as the loss of all synchronization references.

# 14.4.2.2.1 Intra-Building

14.4.2.2.1.1 Within a building, there are different kinds of equipment that require synchronization at the DS1 and DS0 rates. Synchronization at the DS1 rate is accomplished by the frequency synchronizing presence of buffer stores at various DS1 transmission interfaces. Synchronization at the DS0 rate is accomplished by using a composite clock signal that phase synchronizes the clocks. Equipment requiring DS0 synchronization frequently does not have adequate buffer storage to accommodate the phase variations among different equipment. Control of phase variations to an acceptable level is accomplished by externally timing all interconnecting DS0 circuits to a single clock source and by limiting the interconnection of DS0 equipment to less than 1,500 cable feet. Therefore, a BITS shall provide DS1 and composite

clock signals when appropriate The composite signal is a 64-kHz 5/8<sup>th</sup> duty cycle, return to zero with a bipolar violation every eighth pulse (B8RZ).

# 14.4.2.2.2 Inter-Building

14.4.2.2.1 USWC shall provide inter-building synchronization at the DS1 rate, and the BITS shall accept the primary and secondary synchronization links from BITS in other buildings. From hierarchical considerations, the BITS shall be the highest stratum clock within the building, and USWC shall provide operations capabilities (this includes, but is not limited to, synchronization reference provisioning, synchronization reference status inquiries, timing mode status inquiries and alarm conditions).

# 14.4.3 Synchronization Distribution Requirements

- 14.4.3.1 Central office BITS shall contain redundant clocks meeting or exceeding the requirements for a stratum 2 clock as specified in ANSI T1.101-1994 and Bellcore TR-NWT-001244 Clocks for the Synchronized Network: Common Generic Criteria.
- 14.4.3.2 Central office BITS shall be powered by primary and backup power sources.
- 14.4.3.3 If both reference inputs to the BITS are interrupted or in a degraded mode (meaning off-frequency greater than twice the minimum accuracy of the BITS, loss of frame, excessive bit errors, or in Alarm Indication Signal), then the stratum clock in the BITS shall provide the necessary bridge in timing to allow the network to operate without a frame repetition or deletion (slip free) with performance better than one (1) frame repetition or deletion (slip) per week.
- 14.4.3.4 DS1s multiplexed into a SONET synchronous payload envelope within an STS-n signal (where n is defined in ANSI T1.105-1995) shall not be used as reference facilities for network synchronization.
- 14.4.3.5 The total number of Network Elements cascaded from the stratum 1 source shall be minimized.
- 14.4.3.6 A Network Element shall receive the synchronization reference signal only from another Network Element that contains a clock of equivalent or superior quality (stratum level).

- 14.4.3.7 USWC shall select for synchronization those facilities shown to have the greatest degree of availability (absence of outages).
- 14.4.3.8 Where possible, all primary and secondary synchronization facilities shall be physically diverse (this means the maximum feasible physical separation of synchronization equipment and cabling).
- 14.4.3.9 No timing loops shall be formed in any combination of primary and secondary facilities.
- 14.4.3.10 An Operations Support System (OSS) shall continuously monitor the BITS for synchronization related failures or degradation.
- 14.4.3.11 An OSS shall continuously monitor all equipment transporting synchronization facilities for synchronization related failures or degradation.
- 14.4.3.12 For non-SONET equipment, USWC shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.
- 14.4.3.13 For SONET equipment, USWC shall provide synchronization facilities that have time deviation (TDEV) for integration times greater than 0.05 seconds and less than or equal to 10 seconds; that is less than or equal to 10 nanoseconds. TDEV, in nanoseconds, for integration times greater than 10 seconds and less than 1000 seconds, shall be less than 3.1623 times the square-root of the integration time. For example, for integration times of 25 seconds. TDEV shall be less than 15.8 nanoseconds.

#### 14.5 SS7 Network Interconnection

## 14.5.1.1 **Definition**

Figure 9 depicts Signaling System 7 (SS7) Network Interconnection. SS7 Network Interconnection is the interconnection of AT&T local Signaling Transfer Point Switches (STPs) and AT&T local or tandem switching systems with USWC STPSs. This interconnection provides connectivity that enables the exchange of SS7 messages among USWC switching systems and databases (DBs), AT&T local or tandem switching systems, and other third-party switching systems

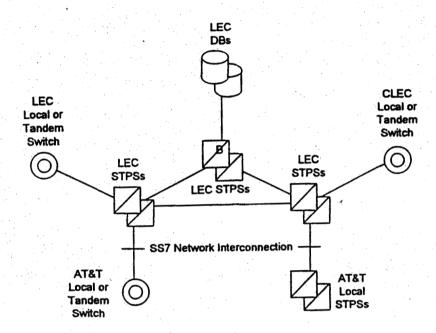


Figure 9. SS7 Network Interconnection

# 14.5.2 Technical Requirements

- 14.5.2.1 SS7 Network Interconnection shall provide connectivity to all components of the USWC SS7 network. These include:
  - (a) USWC local or tandem switching systems;
  - (b) USWC DBs; and
  - (c) Other third-party local or tandem switching systems.
- The connectivity provided by SS7 Network Interconnection shall fully support the functions of USWC switching systems and DBs and AT&T or other third-party switching systems with A-link access to the USWC SS7 network.

  In particular, Figure 10 depicts a circumstance where SS7 Network Interconnection shall provide transport for certain types of Transaction Capabilities Application Part (TCAP) messages. If traffic is routed based on dialed or translated digits between an AT&T local switching system and a

USWC or other third-party local switching system, either directly or via a

USWC tandem switching system, then it is required that the USWC SS7 network convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback, Automatic Recall and Screening List Editing) between the AT&T local STPSs and the USWC or other third-party local switch.

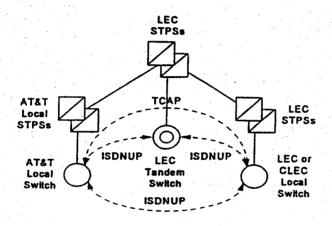


Figure 10. Interswitch TCAP Signaling for SS7 Network Interconnection

- 14.5.2.4 When the capability to route messages based on Intermediate Signaling Network Identifier (ISNI) is generally available on USWC STPSs, the USWC SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the USWC switch routes traffic based on a Carrier Identification Code (CIC).
- 14.5.2.5 SS7 Network Interconnection shall provide all functions of the MTP as specified in applicable Bellcore standards (referenced at 14.5.4.2). This includes:
  - 14.5.2.5.1 Signaling Data Link functions, as specified in applicable Bellcore standards;
  - 14.5.2.5.2 Signaling Link functions, as specified in applicable Bellcore standards; and
  - 14.5.2.5.3 Signaling Network Management functions, as specified in applicable Bellcore standards.
- 14.5.2.6 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in applicable Bellcore standards. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. Where the destination signaling point is a USWC switching system or DB, or is another third-party local or tandem switching system directly connected to the USWC SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination. Where the destination signaling point is an AT&T local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of AT&T local STPSs, and shall not include SCCP Subsystem Management of the destination.
- 14.5.2.7 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in applicable Bellcore standards.
- 14.5.2.8 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in applicable Bellcore standards.

- 14.5.2.9 If and when Bellcore approves standards for Internetwork MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) and USWC STPSs have such capabilities available, SS7 Network Interconnection shall provide these OMAP functions.
- 14.5.2.10 SS7 Network Interconnection shall meet or exceed the following performance requirements:
  - 14.5.2.10.1 MTP Performance, as specified in applicable Bellcore standards;
  - 14.5.2.10.2 SCCP Performance, as specified in applicable Bellcore standards; and
  - 14.5.2.10.3 ISDNUP Performance, as specified in applicable Bellcore standards.

# 14.5.3 Interface Requirements

- 14.5.3.1 USWC shall offer the following SS7 Network Interconnection options to connect AT&T or AT&T-designated local or tandem switching systems or STPSs to the USWC SS7 network:
  - 14.5.3.1.1 A-link interface from AT&T local or tandem switching systems; and
  - 14.5.3.1.2 D-link interface from AT&T STPSs.
- 14.5.3.2 Each interface shall be provided by one or more sets (layers) of signaling links, as follows:
  - 14.5.3.2.1 An A-link layer shall consist of two links, as depicted in Figure 11 on the following page.

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# Attachment 3

Figure 11. A-Link Interface

# 14.5.3.2.2 A D-link layer shall consist of four links, as depicted in Figure 12.

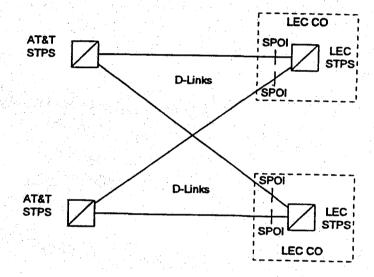


Figure 12. D-Link Interface

- 14.5.3.3 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where the USWC STPs are located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. USWC shall offer higher rate DS1 signaling links for interconnecting AT&T local switching systems or STPSs with USWC STPSs as soon as ANSI approves standards for these capabilities and the capabilities are available in USWC STPSs.
- 14.5.3.4 The USWC CO shall provide intraoffice diversity between the SPOIs and the USWC STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to USWC STPs.
- 14.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. These protocol interfaces shall conform to the following specifications:
  - 14.5.3.5.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP).
  - 14.5.3.5.2 Bellcore GR-1428-CORE, CCS<sup>3</sup> Network Interface Specification (CCSNIS) Supporting Toll Free Service.
  - 14.5.3.5.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services.
  - 14.5.3.5.4 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).
- 14.5.3.6 USWC shall set message screening parameters to block accept messages from AT&T local or tandem switching systems destined to any signaling point in the USWC SS7 network with which the AT&T switching system has a legitimate signaling relation.
- 14.5.4 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following

#### technical references:

- 14.5.4.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP).
- 14.5.4.2 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service.
- 14.5.4.3 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service.
- 14.5.4.4 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services.
- 14.5.4.5 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

# 14.6 Network Interconnection

Appendix A to this Attachment 3 contains the terms and conditions relating to Network Interconnection.

#### 14.7 Basic 911 and E911

## 14.7.1 Definition

Basic 911 and E911 is an additional requirement that provides a caller access to the applicable emergency service bureau by dialing a 3-digit universal telephone number (911).

# 14.7.2 Requirements

14.7.2.1 Basic 911 shall collect 911 calls from one or more local exchange switches that serve a geographic area. It shall then send these calls to the correct

authority o	designated	to rece	ive	such	calls
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- 14.7.2.2 E911 shall provide additional routing flexibility for 911 calls. E911 shall use customer data, contained in the Automatic Location Identification/Data Management System (ALI/DMS), to determine to which Public Safety Answering Point (PSAP) to route the call.
- 14.7.2.3 If available, USWC shall offer a third type of 911 service, S911. All requirements for E911 also apply to S911 with the exception of the type of signaling used on the interconnection trunks from the local switch to the S911 tandem.
- 14.7.2.4 Basic 911 and E911 functions provided to AT&T shall be at least at parity with the support and services that USWC provides to its customers for similar functionality.
- 14.7.2.5 Basic 911 and E911 access from Local Switching shall be provided to AT&T in accordance with the following:
- 14.7.2.5.1 USWC shall conform to all state regulations concerning emergency services.
- 14.7.2.5.2 USWC shall route calls to the appropriate PSAP.
- 14.7.2.5.3 For B911, USWC shall provide and validate customer information to the PSAPs.
- 14.7.2.5.4 For E911, USWC shall use its service order process to update and maintain customer information in the ALI/DMS data base. Through this process, USWC shall provide and validate customer information resident in, or entered into, the ALI/DMS data base.
- 14.7.2.5.5 USWC shall provide for overflow 911 traffic to be routed to USWC Operator Services or, at AT&T's discretion, directly to AT&T operator services.
- 14.7.2.6 Basic 911 and E911 access from the AT&T local switch shall be provided to AT&T in accordance with the following:
- 14.7.2.6.1 If required by AT&T, USWC shall interconnect direct trunks from the AT&T network to the B911 PSAP, or the E911 tandems as designated by AT&T. Such trunks may alternatively be provided by AT&T.

- 14.7.2.6.2 For E911, USWC, shall provide AT&T the capability to make queries to the ALI database. USWC shall provide AT&T the capability to connect a data link to the ALI database. USWC shall provide error reports from the ALI database to AT&T immediately after AT&T inputs information into the ALI database. Alternatively, AT&T may utilize USWC to enter customer information into the database on a demand basis and to validate customer information on a demand basis.
- 14.7.2.6.3 USWC shall provide AT&T access to the Master Street and Address Guide at least at parity with the access USWC provides to itself.

# APPENDIX A

## **NETWORK INTERCONNECTION**

# Section 1. Local Interconnection Trunk Arrangement

- 1.1 The Parties shall initially reciprocally terminate local exchange traffic and IntraLATA/InterLATA toll calls originating on each other's networks as follows:
- 1.1.1 There shall be no restrictions on traffic types carried. Until the access structure is revised, to accommodate non-segregated traffic, pursuant to rules promulgated by the FCC or state commissions, two-way trunk groups will be established wherever practical, based upon AT&T's request. Exceptions to this provision will not be based on technical infeasibility, but will be based on billing, signaling, and network requirements. For example, exceptions include: (a) billing requirements switched access vs. local traffic, (b) signaling requirements MF vs. SS7, (c) network requirements directory assistance traffic to TOPS Tandems, and (d) one-way trunks for 911/E911. The following is the current list of traffic types requiring separate trunk groups, unless otherwise specifically stated in this Agreement:

IntraLATA toll and InterLATA switched access trunks
EAS/local trunks
Directory Assistance trunks
911/E911 trunks
Operator Services trunks
Non-USWC (transit) toll
Non-USWC (transit) local
Commercial Mobile Radio Service/Wireless Traffic

1.1.2 Separate trunk groups will be established connecting AT&T's switch or AT&T's operator service center to USWC's operator service center for operator-assisted busy line interrupt/verify. For traffic from the USWC network to AT&T for Operator Services, USWC shall provide one trunk group per LATA served by the local USWC switch.

#### 1.2 Interconnection Point

1.2.1 "Interconnection" is the linking of the USWC and AT&T networks for the

mutual exchange of traffic. Interconnection is provided by virtual or physical collocation, entrance facilities or meet point arrangements. Interconnection does not include the transport and termination of traffic. "Interconnection Point" or "IP" means the physical point establishing the technical interface, the test point, and the operational responsibility hand-off between AT&T and USWC for the local interconnection of their networks.

- 1.2.2 AT&T will be responsible for implementing and maintaining its network on its side of the IP. USWC will be responsible for implementing and maintaining its network on its side of the IP. If and when the Parties choose to interconnect at a Meet Point, AT&T and USWC will jointly provision the fiber optic facilities connecting the two networks and shall proportionately share the financial and other responsibilities for that facility based on the reasonably negotiated Meet Point percentage.
- 1.2.2.1 AT&T shall designate at least one IP in the LATA in which AT&T originates local traffic and interconnects with USWC. USWC will provide interconnection at any technically feasible point, subject to negotiations between the Parties; such Points shall include, but are not limited to, a Meet Point, the line side of the local switch, the trunk side of the local switch, trunk interconnection points of the tandem switch, central office cross-connect points, and signaling transfer points necessary to exchange traffic and access call related databases.
- 1.2.2.2 Within ten (10) business days of AT&T's request for any IP, USWC shall provide any information in its possession or available to it regarding the environmental conditions of the IP route or location, including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in USWC's possession, or the possession of a current or former agent, contractor, employee, lessor or tenant of USWC's.
- 1.2.2.3 USWC shall allow AT&T to perform any environmental site investigations, including, but not limited to, asbestos surveys, AT&T deems to be necessary in support of its collocation needs.
- 1.2.2.4 If interconnection is complicated by the presence of environmental contamination or hazardous materials, and an alternative route is available, USWC shall make such alternative route available for AT&T's consideration.

#### 1.2.3 Collocation

Interconnection may be accomplished through either virtual or physical collocation. The terms and conditions under which collocation will be available are described in

# Attachment 4 to this Agreement.

# 1.2.4 Entrance Facility

Interconnection may be accomplished through the provision of an entrance facility. An entrance facility extends from the Point of Interconnection to AT&T's collocated space. The rates for entrance facilities are provided in Schedule 2 to this Agreement.

# 1.2.5 Quality of Interconnection

USWC will not, for the purpose of interconnection, provide to AT&T less favorable terms and conditions than it provides itself or any other party or in a manner less efficient than it would impose on itself or any other party. The quality of interconnection will be at least equal to that USWC provides to itself or any other party. To the extent AT&T requests higher or lower quality interconnection, AT&T agrees to use the Bona Fide Request procedure set forth in this Agreement.

# 1.2.6 Points of Interface (POI)

Upon the request for specific point to point routing, USWC will make available to AT&T information indicating the location and technical characteristics of USWC's network facilities. The following alternatives are negotiable: (a) a DS-1 or DS-3 entrance facility, where facilities are available (where facilities are not available and USWC is required to build, special construction charges may apply.); (b) virtual collocation; (3) physical collocation; and (4) negotiated meet point facilities. Each Party is responsible for providing its own facilities up to the meet point. The Parties will negotiate the facilities arrangement between their networks

# 1.3 General and Technical Requirements

1.3.1 To the extent not inconsistent with Sections 1.1 and 1.2 preceding, the following general and technical requirements shall apply to interconnection.

Traffic shall be combined and routed as follows:

1.3.1.1 USWC shall provide direct trunks for intraLATA traffic (except 911, directory assistance, operator services, and other services that may require special routing) and, at AT&T's request, USWC shall allow AT&T to route such traffic either directly to a USWC tandem or directly to a USWC end-office.

- 1.3.1.2 At AT&T's request, USWC shall receive AT&T traffic destined to the USWC Operator Systems Network Element, on trunks from an AT&T end-office or an AT&T tandem.
- 1.3.1.3 At AT&T's request, USWC shall receive AT&T CAMA-ANI (Centralized Automatic Message Accounting Automatic Number identification) traffic destined to the USWC B911 PSAPs, or E911 tandems, on trunks from an AT&T end-office.
- 1.3.1.4 At AT&T's request, USWC shall receive AT&T SS7 traffic destined to any USWC S911 tandem on trunks from an AT&T end-office.
- 1.3.1.5 When requested by AT&T and a third party carrier, USWC shall provide interconnections between AT&T's network, and the other carrier's network through the USWC network at transmission rates designated by AT&T, including, but not limited to, DS-1, DS-3, and STS-1. USWC shall combine and route traffic to and from other local carriers and InterLATA carriers through the USWC network. At AT&T's request, USWC shall record and keep records of such traffic for AT&T billing purposes.
- 1.3.1.6 USWC shall provide two-way trunk groups for interconnections. At AT&T's request, USWC shall provide uni-directional traffic on such trunks, in either direction, effectively operating them as if they were one-way trunk groups.
- 1.3.2 USWC shall provision trunks without any user restrictions (e.g., option for two-way trunking, and no unnecessary trunk group fragmentation by traffic types).
- 1.3.3 All trunking provided by USWC shall adhere to the applicable performance requirements set forth in the "General Performance Requirements" section of this Agreement.
- 1.3.4 At AT&T's request, USWC shall provide for overflow routing from a given trunk group or groups onto another trunk group or groups as AT&T designates.
- 1.3.5 USWC and AT&T shall agree on the establishment of two-way trunk groups for the exchange of traffic for other IXCs. These trunk groups can be provided in a "meet point" arrangement.
- 1.3.6 Interconnection shall be made available upon AT&T's request at any technically feasible point of interface. All trunk interconnections shall be provided, including, SS7, MF, DTMF, DialPulse, PRI-ISDN, DID (Direct Inward Dialing), CAMA-ANI, and trunking necessary so that interim number portability can be provided.

- 1.3.7 Network Interconnection between USWC and AT&T shall meet or exceed all of the requirements for Network Interconnection set forth in the following technical references:
- 1.3.7.1 GR-317-CORE, Switching System generic requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;
- 1.3.7.2 GR-394-CORE, Switching System generic requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;
- 1.3.7.3 FR-NWT-000271, OSSGR Operator Services Systems generic requirements, Bellcore, 1994 Edition; and
- 1.3.7.4 FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition.

# 1.4 Trunking Requirements

- 1.4.1 USWC agrees to provide designed interconnection facilities that meet the same industry standards for technical criteria and service standards, such as probability of blocking in peak hours and transmission standards.
- 1.4.2 Trunk group connections will be made at a DS-1 or multiple DS-1 level for exchange of EAS/local, intraLATA toll, wireless/Commercial Mobile Radio Service, ancillary services, and switched access traffic. Ancillary service trunk groups will be made below a DS1 level, as mutually agreed upon between the Parties based upon forecasted volumes.
- 1.4.3. Where Common Channel Signaling (CCS) is not available, in-band multi-frequency (MF) wink start signaling will be provided. This MF arrangement will require a separate Local Trunk Circuit between AT&T's switch and USWC's tandems as referenced in Technical Pub. TR-314 and TR394.

#### Section 2. Compensation Mechanisms

#### 2.1 Interconnection Point

2.1.1 Each Party is responsible for bringing their facilities to the IP.

## 2.2 Compensation for Call Traffic Transport and Termination

- 2.2.1 The IP determines the point at which the originating carrier shall pay the terminating carrier for the completion of that traffic. The following compensation elements shall apply:
- 2.2.1.1 "Transport", which includes the transmission and any necessary tandem switching of local telecommunications traffic from the interconnection point between the two carriers to the terminating carrier's end-office switch directly serving the called end-user.
- 2.2.1.2 "Termination", which includes the switching of local telecommunications traffic at the terminating carrier's end office switch.
- 2.3 When an AT&T customer places a call to a USWC customer, AT&T will hand off that call to USWC at the IP. Conversely, when USWC hands over local traffic to AT&T for AT&T to transport and terminate, USWC must use the established IP.
- 2.4 AT&T may designate an IP at any technically feasible point including, but not limited to, any electronic or manual cross-connect points, collocations, telco closets, entrance facilities, and mid-span meets. The transport and termination charges for local traffic flowing through an IP shall be as follows:
- 2.4.1 When calls from AT&T are terminated on USWC's network through the USWC tandem, AT&T will pay to USWC transport charges from the IP to the tandem for dedicated or common transport. AT&T shall also pay a charge for tandem switching, dedicated or common transport to the end office (with mileage calculated as the weighted average of all end offices subtending that tandem), and end-office termination.
- 2.4.2 When USWC terminates calls to AT&T's subscribers using AT&T's switch, USWC shall pay to AT&T transport charges from the IP to the AT&T Switching Center for dedicated or common transport. USWC shall also pay to AT&T a charge symmetrical to its own charges for tandem switching, tandem-to-end-office transport, and end office termination as identified in Section 2.4.1.
- 2.4.3 AT&T may choose to establish direct trunking to any given end office. If AT&T leases trunks from USWC, it shall pay charges for dedicated or common transport. For calls terminating from AT&T to subscribers served by these directly-trunked end offices, AT&T shall also pay an end-office termination. For USWC traffic terminating to AT&T over the direct end office trunking, compensation payable by USWC shall be the same as that detailed in Section 2.4.2 above.

- 2.4.4 Trunking can be established to tandems or end offices or a combination of both via either one-way or two-way trunks. Trunking will be at the DS-0 level, DS-1 level, DS-3/OC-3 level, or higher, as designated by AT&T. Initial trunking will be established between the AT&T switching centers and USWC's access tandem(s). The Parties will utilize direct end office trunking under the following conditions:
- (a) Tandem exhaust If a tandem through which the Parties are interconnected is unable to, or is forecasted to be unable to, support additional traffic loads for any period of time, the Parties will mutually agree on an end office trunking plan that will alleviate the tandem capacity shortage and ensure completion of traffic between AT&T and USWC subscribers.
- (b) Traffic volume The Parties shall install and retain direct end office trunking sufficient to handle actual or reasonably forecasted traffic volumes, whichever is greater, between an AT&T switching center and a USWC end office where the local traffic exceeds or is forecasted to exceed 512 CCS at the busy hour.
- (c) Mutual agreement The Parties may install direct end office trunking upon mutual agreement in the absence of conditions (a) or (b) above and agreement will not unreasonably be withheld by either Party.

#### Section 3. Signaling

- 3.1 Signaling protocol. The Parties will interconnect their networks using SS7 signaling as defined in GR-317 and GR-394 including ISDN User Part ("ISUP") for trunk signaling and Transaction Capabilities Application Part ("TCAP") for CCS-based features in the interconnection of their networks. All appropriate industry standards for signaling interoperability will be followed.
- 3.2 The Parties will provide CCS to each other in conjunction with all two-way trunk groups. The Parties will cooperate on the exchange of Transactional Capabilities Application Part (TCAP) messages to facilitate full inter-operability of CCS-based features between their respective networks, including all CLASS features and functions. All CCS signaling parameters will be provided, including, but not limited to, automatic number identification (ANI), originating line information (OLI), calling party category, and charge number. All privacy indicators will be honored. For terminating FGD, USWC will pass CPN if it receives CPN from FGD carriers. All privacy indicators will be honored. Where available, network signaling information such as Transit Network Selection ("TNS") parameter (CCS platform) and CIC/OZZ information (non-CCS environment) will be provided by AT&T wherever such information is needed for call routing or billing. The

Parties will follow all OBF adopted standards pertaining to TNS and CIC/OZZ codes.

- 3.3 Standard interconnection facilities shall be Extended Superframe (ESF) with B8ZS line code. Where ESF/B8ZS is not available, AT&T will agree to use other interconnection protocols on an interim basis until the standard ESF/B8ZS is available. USWC will provide anticipated dates of availability for those areas not currently ESF/B8ZS compatible.
- 3.4.1 Where AT&T is unwilling to utilize an alternate interconnection protocol, AT&T will provide USWC an initial forecast of 64 Kbps Clear Channel Capability ("64K CCC") trunk quantities within thirty (30) days of Effective Date of this Agreement consistent with the forecasting agreements between the Parties. Upon receipt of this forecast, the Parties will begin joint planning for the engineering, procurement and installation of the segregated 64K CCC Local Interconnection Trunk Groups, and the associated B8ZS Extended Super Frame ("ESF") facilities, for the sole purpose of transmitting 64K CCC data calls between AT&T and USWC. Where additional equipment is required, such equipment would be obtained, engineered, and installed on the same basis and with the same intervals as any similar growth job for IXC, AT&T, or USWC internal customer demand for 64K CCC trunks. Where technically feasible, these trunks will be established as two-way.

## Section 4. Network Servicing

## 4.1 Trunk Forecasting

- 4.1.1 The Parties agree that during the first year of interconnection, joint forecasting and planning meetings will take place no less frequently than once per quarter.
- 4.1.2 The Parties shall establish joint forecasting responsibilities for traffic utilization over trunk groups. Intercompany forecast information must be provided by the Parties to each other four (4) times a year. The quarterly forecasts shall include forecasted requirements for each trunk group identified in Subsection 1.1.1 of this Appendix A to Attachment 3. For tandem-switched traffic, the forecast shall include the quantity of tandem-switched traffic forecasted for each subtending end office. The Parties recognize that, to the extent historical traffic data can be shared between the Parties, the accuracy of the forecasts will improve. Forecasts shall be for a minimum of three (current and plus-1 and plus-2) years and shall include:
- 4.1.2.1 the use of Common Language Location Identifier (CLLI-MSG), described in Bellcore documents BR 795-100-100 and BR 795-400-100; and

4.1.2.2 a description of major network projects anticipated for the following six (6) months that could affect the other Party. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period. This planning will include the issues of network capacity, forecasting and compensation calculation, where appropriate.

# 4.1.3 If forecasts vary significantly:

- 4.1.3.1 If the Parties are unable to reach such a reconciliation, the Local interconnection Trunk Groups shall be provisioned to the higher forecast. At the end of three (3) months, the utilization of the Local Interconnection Trunk Groups will be reviewed and if the average CCS utilization for the third month is under seventy five percent (75%) of capacity, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity.
- 4.1.3.2 If the Parties agree on the original forecast and then it is determined that a trunk group is under seventy five percent (75%) of CCS capacity on a monthly-average basis for each month of any three-month period, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity. In all cases, grade of service objectives identified in this Agreement shall be maintained.
- 4.1.4 Each Party shall provide a specified point of contact for planning forecasting and trunk servicing purposes.

# 4.2 Grade of Service

4.2.1 A blocking standard of one percent (.01) during the average busy hour, as defined by each Party's standards, for final trunk groups between an AT&T end office and a USWC access tandem carrying meet point traffic shall be maintained. All other final trunk groups are to be engineered with a blocking standard of one percent (.01). Direct end office trunk groups are to be engineered with a blocking standard of one percent (.01).

# 4.3 Trunk Servicing

4.3.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by use of an Access Service Request (ASR), or another industry standard eventually adopted to replace the ASR for local service ordering.

- 4.3.2 As further described in this Agreement, both Parties will jointly manage the capacity of Local Interconnection Trunk Groups. USWC's Trunk Servicing Group will send a Trunk Group Service Request (TGSR), or another industry standard eventually adopted to replace the TGSR, to AT&T to trigger changes USWC desires to make to the Local Interconnection Trunk Groups based on USWC's capacity assessment. AT&T will issue an ASR to USWC:
- 4.3.2.1 within ten (10) business days after receipt of the TGSR upon review of and in response to USWC's TGSR, or
- 4.3.2.2 at any time as a result of AT&T's own capacity management assessment, to begin the provisioning process.
- 4.3.3 The interval used for the provisioning of Local Interconnection Trunk Groups shall be no longer than the standard interval for the provisioning of USWC's Switched Access service and shall be consistent with USWC's actual provisioning intervals for its own Switched Access customers. Where the installation of Local Interconnection Trunk Groups is required within a time that is shorter than the standard interval, the Parties will make all reasonable efforts and cooperate in good faith to ensure that the mutually agreed upon due date is met.
- 4.3.4 Orders comprising a major project may be submitted at the same time, in which case their implementation shall be jointly planned and coordinated. Major projects are those that require the coordination and execution of multiple orders or related activities between and among USWC and AT&T work groups, including, but not limited to, the initial establishment of Local Interconnection or Meet Point trunk groups and service in an area, NXX code moves, re-homes, facility grooming, or network rearrangements.
- 4.3.5 AT&T and USWC agree to exchange escalation lists which provide contact personnel information, including vice president-level officers. These lists shall include name, department, title, phone number, and fax number for each person. AT&T and USWC agree to exchange an up-to-date list on a quarterly basis.

# Section 5. Network Management

#### **5.1** Protective Protocols

5.1.1 Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps on traffic toward each others network, when required to protect the public switched network from congestion due to facility failures, switch

congestion or failure or focused overload. AT&T and USWC will immediately notify each other of any protective control action planned or executed.

# 5.2 Rerouting Protocols

5.2.1 Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Expansive controls will only be used when mutually agreed to by the Parties.

## 5.3 Mass Calling

5.3.1 AT&T and USWC shall cooperate and share pre-planning information, where available and in compliance with state regulations, regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.

## Section 6. Usage Measurement

- 6.1 When applicable, each Party shall provide to the other:
- 6.1.1 Belicore AMA formatted records to generate bills to the other Party;
- 6.1.2 measurement of minutes of use over Local Interconnection Trunk groups in actual conversation seconds. The total conversation seconds over each individual Local Interconnection Trunk Group will be totaled for the entire monthly bill-round and then rounded to the next whole minute; and
- 6.1.3 within twenty (20) calendar days after the end of each quarter (commencing with the first full quarter after the Effective Date of this Agreement), a usage report with the total traffic volume described in terms of minutes and messages and call type (local, toll, and other) terminated to each other over SS7 Local Interconnection Trunk Groups.

# Section 7. Responsibilities of the Parties

7.1 USWC and AT&T agree to treat each other fairly, equally and in a

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nondiscriminatory manner for all items included in this Agreement, or related to the support of items included in this Agreement.

- 7.2 AT&T and USWC agree to exchange such reports and/or data as provided in this Agreement to facilitate the proper billing of traffic. Either Party may request an audit of such usage reports on no fewer than ten (10) business days' written notice and any audit shall be accomplished during normal business hours at the office of the Party being audited. Such audit must be performed by a mutually agreed-to independent auditor paid for by the Party requesting the audit and may include review of the data described in Section 7 above. Such audits shall be requested within six (6) months of having received the PLU factor and usage reports from the other Party.
- 7.3 AT&T and USWC will review engineering requirements on a quarterly basis and establish forecasts for trunk and facilities utilization provided under this Agreement. USWC and AT&T will work together to begin providing these forecasts within thirty (30) days from the Effective Date of this Agreement. New trunk groups will be implemented as dictated by engineering requirements for either USWC or AT&T.
- 7.4 AT&T and USWC shall share responsibility for all Control Office functions for Local Interconnection Trunks and Trunk Groups, and both Parties shall share the overall coordination, installation and maintenance responsibilities for these trunks and trunk groups.
- 7.5 AT&T is responsible for all Control Office functions for the meet point trunking arrangement trunks and trunk groups, and shall be responsible for the overall coordination, installation and maintenance responsibilities for these trunks and trunk groups.

#### 7.6 AT&T and USWC shall:

- 7.6.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.
- 7.6.2 Notify each other when there is any change affecting the service requested, including the due date.
- 7.6.3 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its interconnection trunks/trunk groups are installed in accordance with the interconnection order, meet agreed-upon acceptance test requirements, and are placed in service by the due date.

- 7.6.4 Perform sectionalization to determine if a trouble is located in its facility or its portion of the interconnection trunks prior to referring the trouble to each other.
- 7.6.5 Advise each other's Control Office if there is an equipment failure which may affect the interconnection trunks.
- 7.6.6 Provide each other with a trouble reporting/repair contact number that is readily accessible and available twenty-four (24) hours, seven (7) days a week. Any changes to this contact arrangement must be immediately provided to the other Party.
  - 7.6.7 Provide to each other test-line numbers and access to test lines.
- 7.6.8 Cooperatively plan and implement coordinated repair procedures for the meet point and Local Interconnection Trunks and facilities to ensure trouble reports are resolved in a timely and appropriate manner.

# 8. Service Interruptions

- 8.1 Standards and procedures for notification of trunk disconnects will be jointly developed by the Parties within ninety (90) days of the Effective Date of this Agreement. Neither Party shall be expected to maintain active status for a trunk disconnected by the other Party for an extended or indefinite period of time.
- 8.2 The characteristics and methods of operation of any circuits, facilities or equipment of either Party connected with the services, facilities or equipment of the other Party pursuant to this Agreement shall not: (a) interfere with or impair service over any facilities of the other Party; its Affiliates, or its connecting and concurring carriers involved in its services; (b) cause damage to the other Party's plant; (c) violate any Applicable Law or regulation regarding the invasion of privacy of any communications carried over the Party's facilities; or (d) create hazards to the employees of either Party or to the public. Each of these requirements is hereinafter referred to as an "Impairment of Service".
- 8.3 In the event either Party causes an Impairment of Service, as set forth in this Section, the Party whose network or service is being impaired (the "Impaired Party") shall promptly notify the Party causing the Impairment of Service (the "Impairing Party") of the nature and location of the problem. The Impaired Party shall advise the Impairing Party that, unless promptly rectified, a temporary discontinuance of the use of any circuit, facility or equipment affected by the Impairment of Service may be required. Both Parties agree to work together to attempt to promptly resolve the Impairment of Service. If the Impairing Party is unable to promptly remedy the Impairment of Service, the Impaired Party may

temporarily discontinue use of the affected circuit, facility or equipment.

- 8.4 Each Party shall be solely responsible for, and bear the expense of, the overall design of its services. Each Party shall also be responsible for any redesign or rearrangement of its services that may be required because of changes in facilities, operations or procedures, minimum network protection criteria, and operating or maintenance characteristics of the facilities. If one Party creates a circumstance causing additional costs to the other Party, the other Party may collect construction charges from the first Party.
- 8.5 To facilitate trouble reporting and to coordinate the repair of the service provided by each Party to the other under this Agreement, each Party shall designate and define a Trouble Reporting Control Office (TRCO) for such service. Each Party shall furnish a trouble reporting telephone number for the designated TRCO through which each Party shall have access to the location where facility records are normally located and where current status reports on any trouble reports are readily available. Current and historical trouble reports will be made available, if necessary. Alternative out-of-hours procedures shall be established to ensure access to a location that is staffed and has the authority to initiate corrective action.
- 8.6 Where new facilities, services and arrangements are installed to rectify a service interruption, the TRCO shall ensure that continuity exists and take appropriate transmission measurements before advising the other Party that the new circuit is ready for service.
- 8.7 The Parties shall cooperate in isolating trouble conditions. Before either Party reports a trouble condition, it shall use reasonable efforts to isolate the trouble.
- 8.8 In cases where one Party's trouble condition affects a significant portion of the other Party's service, the Parties shall assign the same priority provided to other interconnecting carriers.

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#### SERVICE DESCRIPTION: ANCILLARY FUNCTIONS

#### 1. Introduction

This Attachment sets forth the descriptions and requirements for Ancillary Functions USWC agrees to offer to AT&T under this Agreement.

#### 2. Collocation

Collocation means the right of AT&T to place equipment of its choice in the USCW central offices, serving wire centers and tandem offices, as well as all buildings or similar structures owned or leased by USWC that houses USWC network facilities. This also includes any structures that house network facilities on public rights-of-way, such as vaults containing loop concentrator or similar structures. This equipment may be placed via either a physical or virtual collocation arrangement. With physical collocation, AT&T obtains dedicated space to place and maintain its equipment. With virtual collocation, USWC will install and maintain equipment that AT&T provides to USWC. Collocation also includes USWC providing resources necessary for the operation and economical use of collocated equipment. POIs for network interconnection can be established through virtual or physical collocation arrangements. Collocation is offered for network interconnection between the parties. The collocated party may cross connect to other collocated parties via expanded interconnection channel terminations provided by USWC, provided that AT&T's collocated equipment is used for interconnect with USWC or access to USWC's unbundled network elements. AT&T is responsible for bringing its own or leased facilities to the USWC-designated point of Interconnection. USWC will extend AT&T's facilities form the point of interconnection to the cable vault within the wire center. If necessary, USWC may bring the facilities into compliance with USWC internal fire code standards and extend the facilities to the collocated space. AT&T may collocate transmission equipment (including Digital Cross Connect System) to terminate basic transmission facilities. AT&T may not collocate equipment used to provide enhanced service. AT&T must identify what equipment will be installed, to allow for USWC to use this information in engineering the power, floor loading, heat release, environmental participant level and HVAC. AT&T may collocate the amount and type of equipment it deems necessary in its collocated space in accordance with FCC Rules and Regulations. USWC shall not restrict the types of equipment or vendors of equipment to be installed (except for a restriction on complete Local Digital Switches). AT&T agrees not to use collocated remote switching units (RSUs) to avoid paying appropriate toll access charges to USWC.

Expanded Interconnection Channel Termination (EICT). Telecommunications interconnection between AT&T's collocated equipment and USWC's network is accomplished via an Expanded Interconnection Channel Termination (EICT). This element can be at the DS3, DS1, DS0, or any other technically feasible level, subject to network disclosure requirements of the FCC, depending on the USWC service to which it is connected. The terms and conditions of the tariff for EICT are incorporated only to the extent that they are agreed to by the Parties. Within ninety (90) days (or other acceptable time agreed to by the Parties) of the Effective Date of this agreement, the Parties will meet to review the tariff and seek resolution on disagreed items.

- 2.1.1. If physical site inspection is not required, within five (5) business days of AT&T's request for any space, USWC shall provide any information in its possession or available to it regarding the environmental conditions of the space provided for placement of equipment and interconnection, including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. If a physical site inspection is required, the information will be provided within fifteen (15) calendar days. Information is considered "available" under this Agreement if it is in USWC's possession, or the possession of a current or former agent, contractor, employee, lessor, or tenant of USWC's.
- 2.1.2 USWC shall allow AT&T to perform any environmental site investigations, including, but not limited to asbestos surveys, which AT&T deems to be necessary in support of its collocation needs.
- 2.1.3 If the space provided for the placement of equipment, interconnection, or provision of service contains environmental contamination or hazardous material, particularly but not limited to, asbestos, lead paint or radon, which makes the placement of such equipment or interconnection hazardous, USWC shall offer an alternative space, if available, for AT&T's consideration.

#### 2.2 Virtual Collocation

- 2.2.1 USWC shall provide virtual collocation for the purpose of interconnection or access to unbundled Network Element subject to the rates, terms and conditions of this Agreement.
- 2.2.2 AT&T will not have physical access to the USWC wire center building pursuant to a virtual collocation arrangement.
- 2.2.3 AT&T will be responsible for obtaining and providing to USWC administrative codes, e.g., common language codes, for all equipment specified by AT&T and installed

in wire center buildings.

- 2.2.4 AT&T will be responsible for payment of training of USWC employees for the maintenance, operation and installation of AT&T's virtually collocated equipment when that equipment is different that the equipment used by USWC. Training conditions are further described in the Virtual Collocation Rate Element section following.
- 2.2.5 AT&T will be responsible for payment of reasonable charges incurred as a result of agreed upon maintenance and/or repair of AT&T's virtually collocated equipment.
- 2.2.6 USWC does not guarantee the reliability of AT&T's virtually collocated equipment, but USWC is responsible for proper installation, maintenance, or repair of such equipment.
- 2.2.7 AT&T is responsible for ensuring the functionality and interoperability of virtually collocated SONET equipment provided by different manufacturers.
- 2.2.8 AT&T will transfer possession of AT&T's virtually collocated equipment to USWC via a no cost lease. The sole purpose of the lease is to provide USWC with exclusive possessory rights to AT&T's virtually collocated equipment. Title to the AT&T virtually collocated equipment shall not pass to USWC.
- 2.2.9 AT&T shall ensure that upon receipt of AT&T virtually collocated equipment by USWC, it will make available all access to ongoing technical support to USWC, as available under the equipment warranty or other terms and conditions, all at AT&T's expense. The interconnector shall advise the manufacturer and seller of the virtually collocated equipment that it will be possessed, installed and maintained by USWC.
- 2.2.10 AT&T's virtually collocated equipment must comply with the Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements TR-NWT-000063, electromagnetic compatibility (EMC) per GR-1089-CORE, Company wire center environmental and transmission standards and any statutory (local, state or federal) and/or regulatory requirements, all of the foregoing which may be in effect at the time of equipment installation or that subsequently become effective. AT&T shall provide USWC interface specifications (e.g., electrical, functional, physical and software) of AT&T's virtually collocated equipment.
- 2.2.11 AT&T must specify all software options and associated plug-ins for its virtually collocated equipment.
- 2.2.12 AT&T is responsible for purchasing and maintaining a supply of spares. Upon failure of the AT&T virtually collocated equipment, MCI is responsible for

transportation and delivery of maintenance spares to USWC at the wire center housing the failed equipment.

2.3.13 Where AT&T is Virtually Collocated in a premises which was initially prepared for Virtual Collocated, AT&T may elect to retain its Virtual Collocation in that premises and expand that Virtual Collocation according to the rates, terms and conditions of this Agreement.

## 2.3 Physical Collocation

- 2.3.1 USWC shall provide to AT&T Physical Collocation of equipment necessary for interconnection or for access to unbundled Network Elements, except that USWC shall provide for virtual collocation where space is available or expansion or rearrangement is possible if USWC demonstrates to the Commission that Physical Collocation is not practical for technical reasons or because of space limitations, as provided in Section 251(c)(6) of the Act. AT&T shall pay a prorated amount for expansion of said space. USWC shall provide such Collocation for the purpose of interconnection or access to unbundled Network Elements, except as otherwise mutually agreed to in writing by the parties or as required by the FCC or the appropriate Commission subject to the rates, terms and conditions of this Agreement.
- 2.3.2 Where AT&T is Virtually Collocated in a premises which was initially prepared for Virtual Collocation, AT&T may elect, unless it is not practical for technical reasons or because of space limitations, to convert its Virtual Collocation to physical collocation at such premises in which case AT&T shall coordinate the construction and rearrangement with USWC of its equipment (IDLC and transmission) and circuits for which AT&T shall pay USWC at applicable rates, and pursuant to the other terms and conditions in this Agreement. In addition, all applicable Physical Collocation recurring charges shall apply.
- 2.3.3 AT&T will be allowed access to the POI on non-discriminatory terms. AT&T owns and is responsible for the installation, maintenance and repair of its equipment located within the space rented from USWC.
- 2.3.4 AT&T must use leased space as soon as reasonably possible and may not warehouse space for later use or sublease to another provider. Physical collocation is offered on a space-available, first come, first-served basis.
- 2.3.5 The minimum standard leasable amount of floor space is one hundred (100) square feet. AT&T must efficiently use the leased space; no more that fifty percent (50%) of the floor space may be used for storage cabinets and work surfaces.

- 2.4 AT&T's leased floor space will be separated from other competitive providers and USWC space through cages or hard walls. AT&T may elect to have USWC construct the cage, or choose from USWC approved contractors to construct the cage, meeting USWC's installation Technical Publication 77350. Any deviation to AT&T's request must be approved.
- 2.5 The following standard features will be provided by USWC:
  - 2.5.1 Heating, ventilation and air conditioning; and
  - 2.5. 2 Smoke/fire detection and any other building code requirement.
- 2.6 USWC Responsibilities

**USWC** shall:

- 2.6.1 design the floor space within each location which will constitute AT&T's leased space:
- 2.6.2 ensure that the necessary construction work is performed on a timely basis to build AT&T's leased physical space and the riser from the vault to the leased physical space;
  - 2.6.3 develop a quotation specific to AT&T's request for collocation;
- 2.6.4 extend USWC-provided and owned fiber optic cable from the POI through the cable vault and extend the cable to AT&T's leased physical space or place the cable in fire retardant tubing prior to extension to AT&T's leased physical space;
- 2.6.5 install, maintain, and perform all related activity necessary to provide Channel Termination between USWC's and AT&T's equipment; and
  - 2.6.6 work cooperatively with AT&T in matters of joint testing and maintenance.
- 2.7 AT&T Responsibilities

AT&T shall:

- 2.7.1 determine the type of enclosure for the physical space:
- 2.7.2 procure, install and maintain all fiber optic facilities up to the USWC

## designated POI;

- 2.7.3 provide for installation, maintenance, repair and service of all AT&T's equipment located in the leased physical space; and
- 2.7.4 ensure that all equipment installed by or on behalf of AT&T complies with Bellcore Network Equipment Building System Generic Equipment requirements, USWC environmental and transmission standards, and any statutory (local, federal, or state) or regulatory requirements in effect at the time of equipment installation or that subsequently become effective.
- 2.8 The installation of any interconnection service will be coordinated between the Parties so that AT&T may utilize those services once AT&T has accepted its leased physical space.
- 2.9 If, at any time, USWC reasonably determines that the equipment or the installation does not meet standard industry requirements, such failure being due to actions of AT&T or its agents, AT&T will be responsible for the costs associated with the removal, modification to, or installation of the equipment to bring it into compliance. If AT&T fails to correct any non-compliance within thirty (30) calendar days or as soon as reasonably practical after the receipt of written notice of non-compliance, USWC may have the equipment removed or the condition corrected at AT&T's expense.
- 2.10 If, during installation, USWC reasonably determines that AT&T activities or equipment are unsafe, non-industry standard or in violation of any applicable laws or regulations, USWC has the right to stop work until the situation is remedied. If such conditions pose an immediate threat to the safety of personnel, interfere with the performance of USWC's service obligations, or pose an immediate threat to the physical integrity of the conduit system or the cable facilities, USWC may perform such work and/or take action as is necessary to correct the condition at AT&T's expense.
- 2.11 USWC shall provide basic telephone service with a connection jack as requested by AT&T from USWC for the collocated space. Upon AT&T's request and following the normal provisioning process, this service shall be available at the AT&T collocated space on the day that the space is turned over to AT&T by USWC.
- 2.12 Where available, USWC shall provide access to eyewash stations, bathrooms, and drinking water within the collocated facility on a twenty-four (24) hours per day, seven (7) days per week basis for AT&T personnel and its designated agents.
- 2.13 USWC shall provide AT&T with written notice five (5) business days prior to those

instances where USWC or its subcontractors may be performing work that could reasonably potentially affect AT&T's service. USWC will make reasonable efforts to inform AT&T by telephone of any emergency related activity prior to the start of the activity that USWC or its subcontractors may be performing that could reasonably potentially affect AT&T's service, so that AT&T can take any action required to monitor or protect its service.

- 2.14 USWC shall provide information regarding the location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for USWC point of termination to AT&T within five (5) business days of acceptance of AT&T's acceptance of USWC's quote for collocated space.
- 2.15 USWC shall provide the dimensions for AT&T Outside Plant Fiber ingress and egress into AT&T collocated space within five (5) business days of AT&T's acceptance of USWC's quote for collocated space.
- 2.16 USWC shall provide the sizes and numbers of power feeders for the collocated space to AT&T within ten (10) business days of AT&T's acceptance of USWC's quote for collocated space.
- 2.17 USWC shall provide positive confirmation to AT&T when construction of AT&T collocated space is fifty percent (50%) completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.
- 2.18 AT&T shall be compensated by USWC in accordance with the provisions of Attachment 10 for any delays in the negotiated completion and turnover dates which create expenditures or delays for AT&T.
- 2.19 USWC shall provide the following information to AT&T within five (5) business days or as a reasonably necessary of receipt of a written request from AT&T:
  - 2.19.1 Additional work restriction guidelines.
  - 2.19.2 USWC or Industry technical publication guidelines that impact the design of USWC collocated equipment, unless such documents are already in the possession of AT&T.
  - 2.19.3 Appropriate USWC contacts (names and telephone numbers) for the following areas:

Engineering
Physical & Logical Security

Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety

- 2.19.4 Escalation process for the USWC employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to AT&T's collocation.
- 2.20 Power as referenced in this document refers to any electrical power source supplied by USWC for AT&T equipment. USWC will supply power to support AT&T equipment at equipment specific DC and AC voltages. At a minimum, USWC shall supply power to AT&T at parity with that provided by USWC to itself. If USWC performance, availability, or restoration falls below industry standards, USWC shall bring itself into compliance with such industry standards as soon as technologically feasible.
- 2.20.1 Central office power supplied by USWC into the AT&T equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated AT&T equipment area. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of AT&T equipment. The termination location shall be mutually agreed upon by the parties.
  - 2.20.2 USWC power equipment supporting AT&T's equipment shall:
    - 2.20.2.1 Comply with applicable industry standards (e.g., Bellcore, NEBS, and IEEE, UL and NEC) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
    - 2.20.2.2 Have redundant power feeds with physical diversity and battery back-up as required by the equipment manufacturer's specifications for AT&T equipment, or, at minimum, at parity with that provided for similar USWC equipment at that location;
    - 2.20.2.3 Provide central office ground, connected to a ground electrode located within AT&T collocated space, at a level above the top of AT&T equipment plus or minus two (2) feet to the left or right of AT&T's final request; and
    - 2.20.2.4 The USWC quote shall:

- 2.20.2.4.1 Provide an installation sequence and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing services of either party;
- 2.20.2.4.2 Provide cabling that adheres to Bell Communication Research (Bellcore) NEBS standards TR-EOP-000063; and
- 2.20.2.4.3 Provide Lock Out-Tag Out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines.
- 2.21 Intervals for physical collocation shall be a maximum of three (3) months from the requested date. Virtual collocations shall have a maximum interval of two months.
- 2.22 Installed equipment shall meet Bellcore specifications.
- 2.23 USWC will maintain AT&T's virtually collocated equipment in a non-discriminatory manner. Maintenance includes the change out of electronic cards provided by AT&T and per AT&T's request.

# 2.24 Common Rate Elements

The following rate elements are common to both virtual and physical collocation:

- 2.24.1 Quote Preparation Fee. This covers the work involved in developing a quotation for AT&T for the total costs involved in its collocation request.
- 2.24.2 Entrance Facility. Provides for fiber optic cable on a per two (2) fiber increment basis from the point of interconnection utilizing USWC owned, conventional single mode type of fiber optic cable to the collocated equipment (for virtual collocation) or to the leased space (for physical collocation). Entrance facility includes riser, fiber placement, entrance closure, conduit/innerduct, and core drilling.
- 2.24.3 Cable Splicing. Represents the labor and equipment to perform a subsequent splice to the AT&T provided fiber optic cable after the initial installation splice. Includes a per-setup and a per-fiber-spliced rate elements.
- 2.24.4 48 Volt Power. Provides 48 volt power to the AT&T collocated equipment. Charged on a per ampere basis.
  - 2.24.5 48 Volt Power Cable. Provides for the transmission of -48 Volt DC

power to the AT&T's collocated equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack and local power bay to the closest power distribution bay. It also includes the power cable (feeders) A and B from the local power distribution bay to the leased physical space (for physical collocation) or to the collocated equipment (for virtual collocation).

- 2.24.6 Inspector Labor. Provides for the USWC qualified personnel necessary when AT&T requires access to the point of interconnection after the initial installation or access to its physical collocation floor space, where an escort is required. A call-out of an inspector after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00am to 5:00pm and after business hours are after 5:00pm and before 8:00am, Monday through Friday, all day Saturday, Sunday and holidays.
- 2.24.7 Expanded Interconnection Channel Regeneration. Required when the distance from the leased physical space (for physical collocation) or from the collocated equipment (for virtual collocation) to the USWC network is of sufficient length to require regeneration.
- 2.24.8 Connection to any other network or telecommunications equipment within the location is allowed only through USWC services. Such services will be available as EICTs.
  - 2.24.9 USWC will provide external synchronization when available.
  - 2.24.10 USWC will provide 20 hertz ringing supply when available.
- 2.25 Physical Collocation Rate Elements

The following rate elements apply only to physical collocation arrangements:

2.25.1 Floor Space Rental. Provides the monthly rent for the leased physical space, pro-rata property taxes and base operating costs without -48 Volt DC power. Includes convenience electrical outlets provided in accordance with local codes and may not be used to power transmission equipment or -48 Volt DC power generating equipment. Also includes maintenance for the leased space; provides for the preventative maintenance (climate controls, filters, fire and life systems and alarms, mechanical systems, standard HVAC); biweekly housekeeping services (sweeping, spot cleaning, trash removal) of both the leased physical space and the USWC areas surrounding it; and general repair and maintenance.

- 2.25.2 Enclosure Buildout. The Enclosure Buildout element, either cage or hardwall, includes the material and labor to construct the enclosure specified by AT&T or AT&T may choose from USWC approved contractors to construct the cage, meeting USWC's installation Technical Publication 77350. It includes the enclosure (cage or hardwall), air conditioning (to support AT&T loads specified), lighting (not to exceed 2 watts per square foot), and convenience outlets (3 per cage or number required by building code for the hardwall enclosure). Also provides for humidification, if required.
- 2.25.3 Pricing for the above physical collocation rate elements will be provided on an individual basis due to the uniqueness of AT&T's requirements, central office structure and arrangements.

#### 2.26 Virtual Collocation Rate Elements

The following rate elements apply uniquely to virtual collocation:

- 2.26.1 Maintenance Labor Provides for the labor necessary for repair of out of service and/or service-affecting conditions and preventative maintenance of the AT&T virtually collocated equipment. AT&T is responsible for ordering maintenance spares. USWC will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment for AT&T. A call-out of a maintenance technician after business hours is subject to a minimum charge of (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00am to 5:00pm and after business hours are after 5:00pm and before 8:00am, Monday through Friday, all day Saturday, Sunday and holidays.
- 2.26.2 Training Labor Provides for the billing of vendor-provided training for USWC personnel on a metropolitan service area basis, necessary for AT&T virtually collocated equipment which is different from equipment used by USWC. USWC will require three (3) USWC employees to be trained per metropolitan service area in which the AT&T virtually collocated equipment is located. If, by an act of USWC, trained employees are relocated, retired, or are no longer available, USWC will not require AT&T to provide training for additional USWC employees for the same virtually collocated equipment in the same metropolitan area. Fifty percent (50%) of the amount of training billed to AT&T will be refunded to the original AT&T requesting training, should a second collocator or USWC in the same metropolitan area select the same virtually collocated equipment as AT&T. The second collocator or USWC will be charged fifty percent (50%) of the original amount paid by the first collocator for the same metropolitan area.
  - 2.26.3 Equipment Bay Provides mounting space for the AT&T virtually

collocated equipment. Each bay includes the seven (7) foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation is limited to 78 inches. The monthly rate is applied per shelf.

- 2.26.4 Engineering Labor Provides the planning and engineering of the AT&T virtually collocated equipment at the time of installation, change or removal.
- 2.26.5 Installation Labor Provides for the installation, change or removal of the AT&T virtually collocated equipment.
- 3. Rights of Way (ROW), Conduits, Pole Attachments

#### 3.1 Definitions

- 3.1.1 A Right of Way (ROW) is the right to use the land or other property of another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and may include the right to use discrete space in buildings, building complexes, or other locations.
- 3.1.2 A conduit is a tube or protected trough that may be used to house communication or electrical cables. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more inner ducts.
- 3.1.3 A pole attachment is the connection of a facility to a utility pole. Some examples of facilities are mechanical hardware, grounding and transmission cable, and equipment boxes.

#### 3.2 Requirements

3.2.1 USWC shall make ROW, conduit and pole attachments available to AT&T upon receipt of a request for use within the time periods provided in this Attachment 4, providing all information necessary to implement such a use and containing rates, terms and conditions, including, but not limited to, maintenance and use in accordance with this Agreement and at least equal to those which it affords itself, its Affiliates and others. Other users of these facilities, including USWC, shall not interfere with the availability or use of the facilities by AT&T.

- 3.2.2 Within five (5) business days of AT&T's request for any ROW, conduit or pole attachment, USWC shall provide any information in its possession or available to it regarding the environmental conditions of the ROW, conduit or pole attachment route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in USWC's possession, or the possession of a current or former agent, contractor, employee, lessor, or tenant of USWC's. If the ROW, conduit or pole attachment contain such environmental contamination, making the placement of equipment hazardous, USWC shall offer alternative ROW, conduit or pole attachment for AT&T's consideration. USWC will complete an Environmental, Health and Safety Questionnaire for each Work Location AT&T requests or USWC suggests as a site to be covered under this Agreement. USWC shall return the completed questionnaire to AT&T within ten (10) days and shall assist AT&T, at AT&T's cost, with any further inquiries (such as Phase I or Phase II site assessments) AT&T may desire to make into environmental, health or safety conditions at the Work Location.
- 3.2.3 USWC shall not prevent or delay any third party assignment of ROW to AT&T.
- 3.2.4 USWC shall offer the use of such ROWs it has obtained from a third party to AT&T, to the extent such agreement does not prohibit USWC from granting such rights to AT&T. They shall be offered to AT&T on the same terms as are offered to USWC for the placement of facilities.
- 3.2.5 USWC shall provide AT&T equal and non-discriminatory access to pole space, ducts, conduit, entrance facilities, equipment rooms, CEVs, telephone closets and other apparatus,\_ROW and any other pathways on terms and conditions equal to that provided by USWC to itself or to any other party. Further, USWC shall not preclude or delay allocation of these facilities to AT&T because of the potential needs of itself or of other parties. US West may maintain spare capacity only as reasonably necessary for maintenance and administrative purposes, based on generally accepted engineering principles.
- 3.2.6 All charges assessed by USWC for access to and use of public or private rights of way provided by USWC shall be based on USWC's cost. In addition, USWC, shall tariff innerduct, CEVs and pole attachment rates priced distinctly from other elements. All public ROW are not controlled by USWC and may need to be processed by AT&T with the public agencies.
- 3.2.7 USWC shall not attach, or permit other entities to attach facilities on existing AT&T facilities without AT&T's prior written consent.

- 3.2.8 USWC shall make available to AT&T, by lease or otherwise, the entire innerduct. USWC shall permit manhole interconnections, and, to the extent it permits itself, breaking out of USWC manholes, and breaking out of USWC innerduct or CEVs by AT&T and shall not limit new duct entrances to precast knockouts. USWC shall establish a non-discriminatory priority method to access USWC manholes/innerducts in case of emergency.
- 3.2.9 USWC agrees to produce current detailed engineering and other plant records and drawings of conduit, poles and other ROW, including facility route maps at a city level, as well as cost data, within a reasonable time frame, which in no case shall exceed ten (10) business days following AT&T's request for access to such engineering, cost data and other plant records and drawings of additional conduit, poles and other ROW in selected areas as specified by AT&T. In addition, USWC shall provide to AT&T, at AT&T's request and according to AT&T's specifications, a customized diagram of the innerduct system (including manholes) or pole line. Such information shall be of equal type and quality as that of USWC's own engineering and operations staff. USWC shall also allow personnel designated by AT&T to examine such engineering records and drawings at USWC Central Offices and USWC Engineering Offices upon two (2) days' notice to USWC.
- 3.2.10 USWC shall provide to AT&T a Single Point of Contact for negotiating all structure lease and ROW agreements.
- 3.2.11 USWC shall provide information regarding the availability and condition of ROW, conduit or pole attachments within ten (10) business days of AT&T's request if the information then exists in USWC's records (a records based answer) and ten (10) business days of AT&T's request if USWC must physically examine the conduit or pole attachments (a field based answer) (the "Request"). AT&T shall have the option to be present at the field based survey and USWC shall provide AT&T at least twenty-four (24) hours notice prior to the start of such field survey. During and after this period, USWC shall allow AT&T personnel to enter manholes and equipment spaces and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure. USWC shall send AT&T a written notice confirming availability pursuant to the Request within ten (10) business days after AT&T's request ("Confirmation").
- 3.2.12 For the period beginning at the time of the Request and ending ninety (90) days following Confirmation, USWC shall reserve such ROW, conduit or pole attachment for AT&T and shall not allow any use thereof by any party, including USWC. AT&T shall elect whether or not to accept such ROW, conduit or pole attachment within such 90 day period. AT&T may accept such facilities by sending written notice to USWC ("Acceptance").

After Acceptance by AT&T, AT&T shall have six (6) months to begin attachment and/or installation of its facilities to the ROW, conduit or pole attachment or request USWC to begin make ready or other construction activities. Any such construction, installation or make ready shall be completed by the end of one (1) year after Acceptance. AT&T shall not be in default of the six (6) month or one (1) year requirement above if such default is caused in any way by any action, inaction or delay on the part of USWC or its affiliates or subsidiaries. After Acceptance, USWC shall complete any work required to be performed by USWC or any USWC work requested by AT&T within thirty (30) days of such time the work is required or within thirty (30) days of the time such work is requested by AT&T, whichever time is earlier. AT&T shall begin payment for the use of the ROW, conduit or pole attachment upon the earlier of: (a) completion of construction and installation of the facilities and confirmation by appropriate testing methods to be in a condition ready to operate in AT&T's network or (b) six (6) months after Acceptance.

- 3.2.13 USWC shall relocate and/or make ready existing ROW, conduits or pole attachments where necessary and feasible to provide space for AT&T's requirements. Subject to the requirements above, the parties shall endeavor to mutually agree upon the time frame for the completion of such work within five (5) days following AT&T's requests of this work; however, any such work required to be performed by USWC shall be completed within thirty (30) days, unless otherwise agreed by AT&T in writing. If such agreement does not occur within five (5) days or the work is not completed within thirty (30) days, the matter may be submitted according to the Alternate Dispute Resolution Process, described in Attachment 1, by either party.
- 3.2.14 AT&T may, at its option, once an agreement has been reached, make pole attachments and use AT&T or AT&T-designated personnel to attach its equipment to USWC poles.
- 3.2.15 USWC shall provide AT&T space in manholes for racking and storage of cable and other materials as requested by AT&T.
- 3.2.16 USWC shall remove any retired cable from conduit systems or poles to allow for the efficient use of conduit space and pole spaces. USWC shall perform without delay any modification to innerduct systems that are necessary to allow access to and/or egress from the innerduct systems and CEVs. USWC shall take reasonable steps to expand and/or modify its facilities, including placement of taller poles or additional conduits, if necessary, to accommodate AT&T's request and shall do so within a reasonable period of time. If the parties are unable to agree to such interval, the matter may be submitted according to the Alternate Dispute Resolution Process, described in Attachment 1, by either party.

- 3.2.17 Where USWC has spare inner ducts which are not, at that time, being used for providing its services, USWC shall offer such ducts for AT&T's use. USWC shall not reserve more than one inner duct in any conduit cross section for emergency purposes. Where only two inner ducts remain available (including an emergency spare), USWC shall offer AT&T the use of at least one inner duct.
- 3.2.18 Where a spare inner duct does not exist, USWC shall allow AT&T to install an inner duct in a USWC conduit.
- 3.2.19 Where USWC has any ownership or other rights to ROW to buildings or building complexes, or within buildings or building complexes, USWC shall offer to AT&T:
  - 3.2.19.1 The right to use any available space owned or controlled by USWC in the building or building complex to install AT&T equipment and facilities;
  - 3.2.19.2 Ingress and egress to such space; and
  - 3.2.19.3 The right to use electrical power at parity with USWC's rights to such power.
- 3.2.21 Whenever USWC intends to modify or alter any ROW, conduits or pole attachments which contains AT&T's facilities, USWC shall provide written notification of such action to AT&T so that AT&T may have a reasonable opportunity to add to or modify AT&T's facilities. If AT&T adds to or modifies AT&T's facilities according to this paragraph, AT&T shall bear a proportionate share of the costs incurred by USWC in making such facilities accessible.
- 3.2.22 AT&T shall not be required to bear any of the costs of rearranging or replacing its facilities, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any entity other than AT&T, including USWC. If AT&T's actions increase USWC's maintenance costs, AT&T shall pay those increased costs.
- 3.2.23 USWC shall maintain the ROW, conduits and pole attachments at its sole cost; provided, however, that if AT&T's occupancy of the ROW, conduits and/or pole attachments increases US West's maintenance costs, then AT&T shall reimburse USWC for AT&T's share of the increased costs. AT&T shall maintain its own facilities installed within the ROW, conduits or pole attachments at its sole cost. In the event of an emergency, USWC shall begin repair of its facilities containing AT&T's facilities within two (2) hours of notification by AT&T. If USWC cannot begin repair within such 2 hour period, AT&T may begin such repairs without the presence of USWC personnel. AT&T may climb

poles and enter the manholes, handholes, conduits and equipment spaces containing USWC's facilities in order to perform such emergency maintenance, but only until such time as qualified personnel of USWC arrives ready to continue such repairs. For both emergency and non-emergency repairs, AT&T may use spare innerduct or conduits, including the innerduct or conduit designated by USWC as emergency spare for maintenance purposes; however, AT&T may only use such spare conduit or innerduct for a maximum period of 90 days.

3.2.24 In the event of a relocation necessitated by a governmental entity exercising the power of eminent domain, when such relocation is not reimbursable, USWC shall be solely responsible for all costs of relocation of the ROW, conduits and pole attachments and AT&T shall pay only the costs of any new AT&T facilities and the costs of installation of the facilities in the newly rebuilt USWC ROW, conduits and pole attachments.

#### 4. Unused Transmission Media

#### 4.1 Definitions:

- 4.1.1 Unused Transmission Media is physical inter-office transmission media (e.g., optical fiber, copper twisted pairs, coaxial cable) which has no lightwave or electronic transmission equipment terminated to such media to operationalize its transmission capabilities.
- 4.1.2 Dark Fiber, one type of unused transmission media, is unused strands of optical fiber. Dark Fiber also includes strands of optical fiber existing in aerial or underground structure which have lightwave repeater (regenerator or optical amplifier) equipment interspliced to it at appropriate distances, but which has no line terminating elements terminated to such strands to operationalize its transmission capabilities.

#### 4.2 Requirements

- 4.2.1 USWC shall offer all Unused Transmission Media to AT&T under a lease agreement.
- 4.2.2 USWC shall provide a Single Point of Contact (SPOC) for negotiating all Unused Transmission Media lease agreements.
- 4.2.3 AT&T may test the quality of the Unused Transmission Media to confirm its usability and performance specifications.

- 4.2.4 USWC shall provide to AT&T information regarding the location, availability and performance of Unused Transmission Media within five (5) business days for a records based answer and ten (10) business days for a field based answer, after receiving a request from AT&T ("Request"). Within such time period, USWC shall send written confirmation of availability of the Unused Transmission Media ("Confirmation"). From the time of the Request to ninety (90) days after Confirmation, USWC shall reserve such requested Unused Transmission Media for AT&T's use and may not allow any other party to use such media, including USWC.
- 4.2.5 USWC shall make Unused Transmission Media available to AT&T within twenty (20) business days after it receives written confirmation from AT&T that the Unused Transmission Media previously deemed available by USWC is wanted for use by AT&T. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable AT&T to connect or splice AT&T provided transmission media (e.g., optical fiber) or equipment to the Unused Transmission Media.
- 4.2.6 USWC shall include forecasted AT&T requirements in the design and expansion of its network and capacity to accommodate requests under this Attachment. If USWC anticipates the need to use specific dark fiber within a time period shorter than the term of this Agreement, the Parties may negotiate a separate term for the lease for such dark fiber.

### 4.3 Requirements Specific to Dark Fiber

- 4.3.1 Dark Fiber shall meet the following requirements: single mode, with maximum loss of 0.40 dB/km at 1310 nm and 0.25 dB/km at 1550 nm.
- 4.3.2 AT&T may splice and test Dark Fiber leased from USWC using AT&T or AT&T designated personnel. USWC shall provide appropriate interfaces to allow splicing and testing of Dark Fiber. USWC shall provide an excess cable length of 25 feet minimum (for fiber in underground conduit) to allow the uncoiled fiber to reach from the manhole to a splicing van.

#### 5. DIRECTORY LISTINGS

#### 5.1 Scope

5.1.1 Listings Service ("Listings") consists of USWC placing the names, addresses and telephone numbers of AT&T's end users in USWC's listing database, based on end

user information provided to USWC by AT&T. USWC is authorized to use Listings in Directory Assistance (DA) and as noted in Subsection 5.1.4, below.

- 5.1.2 AT&T will provide in standard, mechanized format, and USWC will accept at no charge, one primary listing for each main telephone number belonging to AT&T's end user customers. Primary listings are as defined for USWC end users in USWC's general exchange tariffs. AT&T will be charged for premium and privacy listings, e.g., additional, foreign, cross reference, informational, etc., at USWC's general exchange listing tariff rates, less the wholesale discount. AT&T utilizing Remote Call Forwarding for local number portability can list only one number without charge either the end customer's original telephone number or the AT&T-assigned number. The standard discounted rate for an additional listing applies to the other number.
- 5.1.3 USWC will furnish AT&T the Listings format specifications. AT&T may supply a maximum of one batch file daily, containing only Listings that completed on or prior to the transmission date. USWC cannot accept Listings with advance completion dates. Large volume activity (e.g., 100 or more listings) on a caption set is considered a project that requires coordination between AT&T and USWC to determine time frames.
- 5.1.4 AT&T grants USWC a non-exclusive license to incorporate listings information into its directory assistance database. AT&T shall have the right to select one (1) of the following two (2) options for USWC's use of Directory Listings and dissemination of Directory Listings to third Parties:

#### EITHER:

5.1.4.1 AT&T's customers shall be treated the same as USWC's end user listings and no prior authorization will be needed for USWC to release Directory Listings to directory publishers or other third Parties. USWC will incorporate Listings information in all existing and future directory assistance applications developed by USWC. If this option is selected, AT&T will authorize USWC to sell and otherwise make Listings available to directory publishers. USWC shall be entitled to retain all revenue associated with any such sales. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.

#### OR:

5.1.4.2 AT&T's customers shall be included in USWC's Directory Assistance, but prior written authorization shall be required from AT&T for all other uses. AT&T will make its own, separate agreements with USWC, third Parties and directory publishers for all uses of its Directory Listings beyond USWC's Directory

Assistance. USWC will sell Directory Listings to directory publishers (including USWC's publisher affiliate), other third Parties and USWC products only after the third party presents proof of AT&T's authorization. USWC shall be entitled to retain all revenue associated with any such sales. Directory Listings shall not be provided or sold in such a manner as to segregate end users by carrier.

5.1.5 To the extent that state tariffs limit USWC's liability with regard to Listings, the applicable state tariff(s) is incorporated herein and supersedes Section 7, "Limitation of Liability", of this Agreement with respect to Listings only.

# 5.2 USWC Responsibilities

- 5.2.1 USWC is responsible for maintaining Listings, including entering, changing, correcting, rearranging and removing Listings in accordance with AT&T orders. USWC will take reasonable steps in accordance with industry practices to accommodate non-published and non-listed Listings provided that AT&T has supplied USWC the necessary privacy indicators on such Listings.
- 5.2.2 USWC will include AT&T Listings in USWC's Directory Assistance service to ensure that callers to USWC's Directory Assistance service have non-discriminatory access to AT&T's Listings.
- 5.2.3. USWC will ensure the AT&T Listings provided to USWC are published in the white pages directory published on USWC's behalf. The white page directory published on behalf of USWC will treat all providers the same. The directory shall allot to AT&T the same amount of space in the Customer Guide section of the white pages for AT&T specific information as it allots to USWC.

# 5.3 AT&T Responsibilities

- 5.3.1 AT&T agrees to provide to USWC its end user names, addresses and telephone numbers in a standard mechanized format, as specified by USWC.
- 5.3.2 AT&T will supply its ACNA/CIC or CLCC/OCN, as appropriate, with each order to provide USWC the means of identifying Listings ownership.
- 5.3.3 AT&T represents and warrants the end user information provided to USWC is accurate and correct. AT&T further represents and warrants that it has reviewed all Listings provided to USWC, including end user requested restrictions on use such as non-published and non-listed. AT&T shall be solely responsible for knowing and adhering to

state laws or rulings regarding Listings (e.g., no solicitation requirements in the states of Arizona and Oregon, privacy requirements in Colorado), and for supplying USWC with the applicable Listing information.

- 5.3.4 AT&T is responsible for all dealings with, and on behalf of, AT&T's end users, including:
  - (a) All end user account activity, e.g., end user queries and complaints.
  - (b) All account maintenance activity, e.g., additions, changes, issuance of orders for Listings to USWC.
  - (c) Determining privacy requirements and accurately coding the privacy indicators for AT&T's end user information. If end user information provided by AT&T to USWC does not contain a privacy indicator, no privacy restrictions will apply.
  - (d) Any additional services requested by AT&T's end users.
- 5.4 The terms contained in this Section refer specifically to the provision of Listings from AT&T to USWC. The Parties acknowledge that the Telecommunications Act of 1996 imposes reciprocal obligations on incumbent and new entrant Local Exchange providers with respect to directory assistance listings and white pages listings. As a result, the Parties agree that the terms in this Section are reciprocal and also include the provision of Listings from USWC to AT&T, in the event that AT&T provides its own directory assistance service or publishes its own white pages directory.
- 5.5 USWC and AT&T agree that certain issues, such as yellow page advertising, directory distribution, access to call guide pages, yellow page listings, will be the subject of negotiations between AT&T and directory publishers, including U S West Dex. USWC acknowledges that AT&T may request USWC to facilitate discussions between AT&T and U S WEST Dex.
- 5.6 USWC shall facilitate the distribution of Directory Listings in book form ("Telephone Directories") by US West Dex to AT&T Customers who have a listing in such book for either white or yellow pages. Timing of such delivery and the determination of which Telephone Directories shall be delivered (by customer name, NPA/NXX or other criteria), and the number of Telephone Directories to be provided per customer, shall be provided under the same terms that USWC delivers Telephone Directories to its own local service customers.

- 5.7 USWC agrees to provide to AT&T operators on line access to USWC's directory assistance database. The database may not be electronically transferred to AT&T. AT&T shall reimburse USWC for the reasonable costs of deploying the service. USWC may not impose volume or term requirements associated with this service.
- 5.7 If USWC receives a commission from USWC Dex for placement of yellow pages advertising, AT&T should receive the same commission. US West Dex must give AT&T the same opportunity to provide directory listings as it provides to USWC (for example, through some type of bidding process). If AT&T is not given the same directory listing opportunity as USWC, AT&T should receive a share of the revenues (based on the percentage of lines belonging to AT&T in the particular list) that USWC receives from US West Dex.
- 5.8 USWC must ensure that it is treated in a competitively neutral manner by US West Dex vis a vis the new entrants for yellow pages advertising. USWC should make its contracts with US West Dex available for review by AT&T, as necessary, to ensure that AT&T is receiving the same services at the same terms as USWC.

#### 6. Subscriber List Information

- 6.1.1 USWC shall provide to AT&T, at AT&T's request, within thirty (30) days after the Effective Date, all published Subscriber List Information (including such information that resides in US WEST's master subscriber system database) via electronic data transfer acceptable to AT&T, on the same terms and conditions and at the same rates that USWC provides its own Subscriber List information to other third parties. Changes to the Subscriber List Information shall be updated on a daily basis through the same electronic data transfer means used to transmit the initial List. Subscriber List Information provided shall indicate whether the customer is a residence or business customer.
- 6.1.2 USWC shall provide Subscriber List Information that includes AT&T Customers to third parties, as required by the Act, on the same terms and conditions and at the same rates that USWC provides its own Subscriber List Information to third parties. AT&T shall receive its pro-rate share of any amounts paid by third parties to USWC for such Subscriber List Information. AT&T's pro-rate share shall be calculated based on the proportionate share of AT&T Customers to the total number of customers included in the Subscriber List Information.

# **ATTACHMENT 5**

# **Provisioning and Ordering**

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# Attachment 5

# APPENDIX C - UNBUNDLED COMBINATION PROVISIONING FORMAT

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# **Provisioning and Ordering**

#### 1. Network Deployment

- 1.1 USWC shall deploy and keep deployed network facilities in all its serving areas in every LATA as necessary to provide on a timely basis each of the Elements or Combinations thereof, as defined below, that USWC is required to offer to AT&T pursuant to this Agreement.
- 1.2 Throughout the term of this Agreement, the quality of the technology, equipment, facilities, processes and techniques (including, without limitation, such new architecture, equipment, facilities and interfaces as USWC may deploy) that USWC provides to AT&T under this Agreement must be at least equal in quality to that provided by USWC to itself.

# 2. General Provisioning Requirements

- 2.1 AT&T may order Elements either individually or in any combination. Combinations consist of multiple Elements that are logically related to enable AT&T to provide service in a geographic area or to a specific customer and that are placed on the same order by AT&T.
- 2.2 Combinations shall be identified and described by AT&T so that they can be ordered and provisioned together and shall not require the enumeration of each Element within that Combination on each provisioning order. When ordered in combination, Elements which are interconnected and working shall remain interconnected and working. Those which are not interconnected and working shall be made so by USWC.
- 2.3 Multiple individual Elements may be ordered by AT&T from USWC on a single order without the need to have AT&T send an order for each Element.
- 2.4 USWC shall provide provisioning services to AT&T during the same hours it provides such services to itself, but at a minimum Monday through Friday from 8:00 a.m. to 5:00 p.m., within each respective continental U.S. time zone. AT&T may request USWC to provide Saturday, Sunday, holiday, and/or off-hour provisioning services. If AT&T requests that USWC perform provisioning services at times or on days other than as required in the preceding sentence, USWC shall quote, within one (1) day of the request, a cost-based rate for such services. If AT&T

accepts USWC's quote, USWC shall perform such provisioning services.

- 2.5 USWC shall provide a Single Point of Contact (SPOC) for all ordering and provisioning contacts, and for order flow associated with the purchase and provisioning of USWC's unbundled Elements or Combinations. The SPOC shall provide an electronic interface twenty-four (24) hours a day, seven (7) days a week for all ordering and provisioning order flows. The SPOC shall also provide to AT&T a toll-free nationwide telephone number (operational during the time periods the ordering and provisioning process is available to USWC itself, but at a minimum from 8:00 a.m. to 5:00 p.m., Monday through Friday, within each respective continental U.S. time zone) which will be answered by capable staff trained to answer questions and resolve problems in connection with the provisioning of Elements or Combinations.
- 2.6 USWC and AT&T shall jointly establish interface contingency and disaster recovery plans for the ordering and provisioning of USWC's unbundled Elements or Combinations.
- 2.7 USWC will recognize AT&T as the customer of record of all Elements or Combinations ordered by AT&T and will send all notices, invoices and pertinent information directly to AT&T.
- 2.8 Intentionally deleted.
- 2.9 Intentionally deleted.
- 2.10 Intentionally deleted.

### 3. Specific Provisioning Process Requirements

- 3.1 When AT&T orders Local Switching Elements (either individually or as part of a Combination), AT&T may also obtain all technically available features and functions from the specified USWC switch (e.g., BRCS, CLASS and LASS features). In addition, USWC shall provide AT&T with the Design Layout Record (DLR) for the facilities ordered except for simple 2-wire dial tone circuits.
- 3.2 When requested by AT&T, USWC will schedule installation appointments (USWC employee dispatch). USWC will provide appropriate training for all its employees who may interface with AT&T's Customers based on AT&T's instructions and materials.

- 3.3 Upon request from AT&T, USWC will provide AT&T for six (6) months, or until the next publication of USWC's directory, an intercept referral message in the Local Switching Element for a new AT&T telephone number. This message shall be approved by AT&T and shall be similar in format to the intercept referral messages currently provided by USWC for its own end-users.
- 3.4 USWC will provide AT&T with a Firm Order Confirmation (FOC) for each order within twenty-four (24) hours for a simple order or eight (8) business days for a complex order, of USWC's receipt of that order. The FOC must contain an enumeration of AT&T's ordered Elements or Combinations (and the specific USWC naming convention applied to those Elements or Combinations), as well as the features, options, physical interconnection, quantity and USWC commitment date for order completion (Committed Due Date).
- Upon work completion, USWC will provide AT&T electronically (unless otherwise notified by AT&T), per order, an Order Completion that states when such order was completed. USWC shall provide specific order detail as enumerated on the FOC and shall state any additional charges (e.g., Time and Cost charges) up to the previously agreed upon limit associated with that order.
- 3.6 USWC will perform pre-testing consistent with industry standards and will provide AT&T in writing, or electronically if directed by AT&T, all test and turn-up results associated with the Elements or Combinations ordered by AT&T. USWC shall provide these test results to AT&T at the same time USWC provides the order-specific Order Completion.
- 3.7 As soon as identified, USWC shall notify AT&T electronically (unless otherwise notified by AT&T) of Rejections/Errors contained in any of the data element fields contained on any AT&T order.
- 3.8 As soon as identified, USWC shall notify AT&T electronically (unless otherwise notified by AT&T) of any instance in which USWC's Committed Due Date is in jeopardy of not being met by USWC on any element or feature contained in any order for Network Elements or Combinations. USWC shall concurrently indicate its new Committed Due Date.
- 3.9 Within twenty-four (24) hours of AT&T's request, USWC will perform cooperative testing with AT&T (including trouble shooting to isolate any problems) to test Elements or Combinations purchased by AT&T in order to identify any performance problems.

- 3.10 USWC will provide AT&T and its customers with Directory Listings as specified in the General Terms and Conditions of this Agreement.
- 3.11 USWC will provide AT&T disaster recovery plans, acceptable to MCI, associated with the recovery of any systems and or functions connected with the ordering and provisioning processes.
- 3.12 AT&T may choose between SCE/SMS AIN Access and SS7 AIN Access, as designated on AT&T's provisioning order.
- 3.13 USWC shall inform AT&T if a customer action results in the reassignment of an AIN trigger from an AT&T AIN application to some other service provider's application. Such notification shall be completed within twenty-four (24) hours of the action via electronic interface as described in the Account Maintenance requirements specified in the Customer Billing section of this Agreement.
- 3.14 USWC shall maintain a database containing AIN trigger configurations and other data necessary to allow AT&T to determine AIN service and feature interactions. USWC shall provide AT&T the capability to make queries on demand to such database.
- 3.15 USWC shall provision AIN triggers as AT&T requests on its provisioning order.
- 3.16 USWC shall notify AT&T at the time of installation of any change made in the service and/or feature set that differs from AT&T's original service order as given to USWC.
- 3.17 USWC shall provide AT&T the testing information employed by USWC prior to the establishment of service if outside USWC Technical Publications, so AT&T can verify that the "end to end" service meets such requirements.

## 4. General Ordering Requirements

- 4.1 Upon AT&T's request through a Suspend/Restore Order, USWC shall suspend or restore the functionality of any Network Element or Combination. USWC shall implement any restoration priority on a per Network Element, or Combination, basis in a manner that conforms with AT&T's requested priorities and any applicable regulatory policies or procedures.
- 4.2 USWC shall provide AT&T the functionality to block calls (e.g., 800, 900, 976

international calls) by line or trunk on an individual switching element basis.

- 4.3 When ordering a Local Switching Element, AT&T may order from USWC separate interLATA and intraLATA capabilities (i.e., 2 PICs where available) on a line or trunk basis.
- 4.4 Unless otherwise directed by AT&T, when AT&T orders an Element or Combination, all pre-assigned trunk or telephone numbers currently associated with that Network Element or Combination shall be retained without loss of feature capability and without loss of associated Ancillary Functions including, but not limited to, Directory Assistance and 911/E911 capability.
- 4.5 When AT&T orders Elements or Combinations that are currently interconnected and functional, such Elements and Combinations will remain interconnected and functional without any disconnection or disruption of functionality. This shall be known as Contiguous Network Interconnection of network elements. There shall be no charge for such interconnection.

# 5. Ordering Interfaces

- USWC shall provide AT&T an Electronic Interface (EI) for transferring and receiving orders, FOCs, Service Completions and other provisioning data and materials (e.g., access to Street Address Guide (SAG) and Telephone Number Assignment Data Base). This EI shall be administered through a gateway that will serve as a single point of contact for the transmission of such data from AT&T to USWC, as well as from USWC to AT&T. The requirements and implementation of such a data transfer system are subject to future agreement between AT&T and USWC. Until such time as a gateway is established, the EI to be used shall be of the same quality and timeliness as is currently utilized by USWC, as may be modified during the interim period. Unless otherwise agreed to by the Parties, USWC shall provide AT&T updated customer addresses and number change information at least on a daily basis.
- 5.2 When ordering a Local Switching Element, AT&T's representatives will have realtime access to USWC customer information systems so as to allow the AT&T representatives to perform the following tasks:
- 5.2.1 Obtain customer profiles, including customer name, billing and residence address, billed telephone numbers, and identification of features and services subscribed to by the customer;

- 5.2.2 Obtain information on all features and services available in the end-office from which the customer is served;
- 5.2.3 Enter the order for the desired features and services;
- 5.2.4 Provide an assigned telephone number (if the customer does not have one assigned). Reservation and aging of these numbers will remain USWC's responsibility;
- 5.2.5 Establish the appropriate directory listing;
- 5.2.6 Determine if a service call is needed to install a line or service:
- 5.2.7 Provide service availability dates to the customer;
- 5.2.8 Provide information on the dispatch/installation schedule, if applicable;
- 5.2.9 Order intraLATA toll service and access to long distance service in a single, unified order; and
- 5.2.10 Suspend, terminate or restore service.
- 5.2.11 USWC also shall provide AT&T with real-time notification as to whether a customer has a preexisting pending or held order.
- 5.2.12 USWC also shall provide AT&T with real-time access to order status.
- 6. USWC Provision of Information
- 6.1 USWC shall provide AT&T upon request:
- 6.1.1 A listing, by switch CLLI, of all services and features technically available from each switch that USWC may use to provide a Local Switching Element;
- 6.1.2 A listing, by street address detail, of the service coverage area of each switch CLLI;
- 6.1.3 All engineering design and layout information for each network Element and Combination:
- 6.1.4 A listing of all technically available functionalities for each network Element and

#### Combination; and

- 6.1.5 Advanced information on the details, and requirements for planning and implementing, NPA splits.
- 6.2 Promptly after the Effective Date of this Agreement, USWC shall provide AT&T an initial electronic copy and a hard copy of the SAG or its equivalent. Updates shall be provided to AT&T electronically as changes are made to the SAG. Unless otherwise agreed to by the Parties, USWC shall provide AT&T updated customer address information at least on a daily basis.
- 7. Order Format and Data Elements for Individual Network Elements
- 7.1 In ordering Elements or Combinations, AT&T will utilize standard industry order formats and data elements developed by the Order and Billing Forum (OBF). Industry standards do not currently exist for the ordering of Elements or Combinations. Therefore, until such standard industry order formats and data elements are developed by the OBF, AT&T will utilize the format described in this Section to address the specific data requirements necessary for the ordering of network Elements or Combinations.
- 7.2 AT&T and USWC shall agree upon the appropriate ordering and provisioning codes to be used for each Element or Combination. These codes shall be known as data elements
- 7.3 Each order for an Element or a Combination will contain the following order-level sections, as currently defined by the OBF: Administration, Bill, Contact and End User Information.
- 7.4 In addition to the above OBF sections, AT&T will provide provisioning data in the format defined below when ordering Elements or Combinations. First, AT&T will state whether it is ordering an Element (one or more of the Elements described in this Agreement) or a Combination (multiple Elements on the same order). AT&T will then provide data in the following provisioning categories, with such data to be provided on the OBF ordering form as completed data fields:
- 7.4.1 Activity. The activity field will include one of the following entries:
  - (A) Add. This will apply when a new Element or Combination is being ordered.

- (C) Change. This will apply when an existing Element or Combination is being altered in some way.
- (D) Disconnect. This will apply when an existing Element or Combination is being completely disconnected.
- (R) Record Only. This will apply when there is no physical or logical work required, but it is necessary to update USWC's internal records. This entry will not apply to the functional databases listed under the SCPs/Databases Element. Any functional change to these databases will be handled under an Add, Change, or Disconnect order.
- 7.4.2 Order Activity Description. For each activity, a further description of the Order Activity may be required. The following Order Activity Descriptions may be applied to any Add, Change, Disconnect or Record Only order. In some cases, more than one of these may apply to a particular order.

Modify: This will apply when the order has been modified in some way.

Cancel: This will apply when the order has been canceled, and no provisioning activity related to that order is to be completed.

Expedite: This will apply when the provisioning activity is required to be completed in less time than stipulated by the minimum element intervals as defined in Section 9.1. The Desired Due Date category will reflect the date the activity should be completed.

Sequence: This will apply when components of the order must be worked in the proper sequence or when components of the order are sequentially related to components of another order.

Coordinated: This will apply when components of the order must be worked simultaneously or when components of this order must be coordinated with components of another order.

Suspend: This will apply when the function of the network Element or Combination is to be suspended until further notice. The exact nature of the suspension will be reflected within the body of the order. This field will be used with Change (C) Order Activity.

Restore: This will apply when previously suspended functionality is to be restored. This field will be used with a Change (C) Order Activity.

- 7.4.3 Purpose of Order. The Purpose of Order will contain a brief statement describing the overall purpose of the order (e.g., Add new ISDN loop or build dedicated trunking/transport from local end office to AT&T OSPS 5E).
- 7.4.4 Type of Element or Combination. The Type of Element or Combination category consists of two parts: an "E-" (designating Element) or a "C-" (designating Combination); followed by the two-character code for the Element(s) (e.g., E-LS (Local Switching Element) or C-DT/LS (Combination of Dedicated Transport and Local Switching)). Below are the Elements and their two-character codes:

LD - Loop Distribution

LC - Loop Concentrator/Multiplexer

LF - Loop Feeder

LS - Local Switching

**OS** - Operator Systems

CT -- Common Transport

**DT** - Dedicated Transport

SS - Signal Transfer Points

SL - Signaling Link Transport

DB - SCPs/Databases (LNP, LIDB, Toll Free, ALI/DMS)

TS - Tandem Switching

- 7.4.5 Interconnection Locations. This category describes the begin-point and end-point of the Element or Combination. For example, the point of termination (POT) may be listed as a switch CLLI, a frame tie down location, a channel on a T3 or a customer address. Various types of POTs are described in the tables shown in Appendix A.
- 7.4.6 Interconnection Specific. The Interconnection Specific category describes the nature of the interconnection and the appropriate relationships within the network Element or combination. The tables in Appendix A describe the appropriate type of Interconnection Specific for each Network Element or Combination. The following definitions apply:

Contiguous: All cross-connects, muxing, cross-office ties, etc. will be included between the two interconnection points listed under "Interconnection Locations" so that the Element or Combination is delivered fully functional.

Routing: Indicates that routing is part of the necessary interconnection.

Functionally Inclusive: Indicates that, when USWC provisions the Element or Combination, it provides all functionality related to interconnection as defined within the Unbundled Network Element Attachment of this Agreement.

- 7.4.7 Element Identification. This field includes the precise identifier of the Network Element. For example, the identifier can be a circuit ID, facility name, switch CLLI, or Working Telephone Number. The appropriate type of Element ID is described for each Network Element/Combination within the tables set forth in Appendix A.
- 7.4.8 Object. The Object identifies the basic unit of the Network Element or Combination. Examples include Network Trunk (for the Element LS) and DS1 (for the Element DT). The Objects related specifically to each Element or Combination are provided in the tables set forth in Appendix A.
- 7.4.9 Quantity/Capacity. This field lists the Quantity/Capacity of Objects. For example, for the Loop Combination (see description in Section 8.3 below), the number "1" in this field indicates that one loop combination is being ordered. On the other hand, for the Object "DT" the number "4" would indicate that a capacity of 4 DS1 is being ordered.
- 7.4.10 Options. For each Object, there may be numerous Options. This category identifies the specific Option of the selected Object. In most cases, only one Option applies for each Object. One exception is LC (Loop Concentrator/ Multiplexer). This exception is noted within the tables set forth in Appendix A. The specific Options for each Object are contained within the Provisioning Network Element/Combination tables. Examples include 2-wire (for the Object Analog Loop), DID (for the Object Customer Trunk), and ESF (for the Object DS1).
- 7.4.11 Characteristics. For each Option, there may be multiple Characteristics that require additional detail. This category identifies those Characteristics, along with the necessary details. The appropriate types of Characteristics are described for each Element or Combination within the tables set forth in Appendix A. Examples include ISDN conditioned (for the Option 2-wire) and TSG (for the option DID).
- 7.4.12 Features. This field identifies the Features specific to the network Element/
  Combination. For example, when the network Element is Local Switching, the
  CLASS/LASS features will be included in this category. AT&T will direct USWC
  which of these features to activate for a specific customer.

- 7.4.13 Desired Due Date. This field identifies the date the entire order is expected to be completed.
- 7.4.14 Due Date Detail. This field identifies interim dates (for Combinations where the Element Due Dates differ), and the relationship between the provisioning activities internal to the order, and those provisioning activities outside the order that may be related. Coordination and sequencing requirements will be reflected in this field.
- 7.4.15 Remarks. This field will include any remarks that are related to the provisioning order that are not reflected elsewhere.
- 7.5 When ordering an Element (individually or as part of a Combination), the interconnection and functionality internal to that Element will not be specifically ordered by AT&T and will automatically be provided by USWC. For example, when ordering the element DT (Dedicated Transport), the use of Digital Cross Connects that might be necessary to provide the connectivity between two interconnection locations will not be described on AT&T's order.
- 7.6 Examples of the provisioning format to be used by AT&T when ordering certain provisioning activities for individual network Elements are set forth in Appendix B.
- 8. Order Format and Data Elements for Combinations
- 8.1 AT&T may purchase network Elements either individually or in Combinations. Combinations of Contiguous Network Elements can be ordered: (a) on a case-by-case basis for those elements that are customer-specific; or (b) on a common-use basis for those elements that are shared by multiple customers.
- 8.2 When ordering a Combination, AT&T will have the option of ordering all available capabilities and functionalities of each of the underlying individual Elements.
- When ordering either customer-specific or common-usage Combinations, AT&T may specify the functionality of that Combination without the need to specify the configuration of the individual Elements needed to perform that functionality. For example, AT&T has identified a Combination, designated as the Loop Combination, with the functionality described in Appendix A. This Combination shall be identified as C-LOOP, with its functionality as described in Appendix C, LOOP Combination. This Combination can be comprised of all or some of the following Elements, depending on the individual customer: LD (Loop Distribution), LC (Loop Concentrator/ Multiplexer) and LF (Loop Feeder). When ordering this Combination, AT&T will order the C-Loop functionality and USWC will provision those Elements

needed, as appropriate, on a case-by-case basis. Appendix C, example 1 illustrates how AT&T will order the Loop Combination.

- AT&T may also choose to purchase from USWC a LOOP and Switching Combination which would be comprised of the LOOP Combination described above and Network Element LS (Local Switching). This Combination would allow AT&T to purchase switching features (such as CLASS features) and functionalities on a per-customer basis. AT&T will order the LOOP and Switching Combination as illustrated in Appendix C, example 2.
- Prior to providing Local Service in a specific geographic area, or when AT&T requires a change of network configuration, AT&T may place an order with USWC requiring USWC to prepare certain common-usage elements and functionalities for AT&T. AT&T has identified one possible set of these elements and functionalities as the Local Switching Conditioning Combination. This Combination may be comprised of all or some of the following individual Network Elements: LS (Local Switching), CT (Common Transport), SS (Signal Transfer Points), DB (SCPs/Databases) and TS (Tandem Switching). In order to provide these elements and their respective functionalities to AT&T, USWC shall prepare its network for AT&T's use of these common elements by readying each necessary switch with an AT&T Line Class Code. AT&T will order the Local Switching Conditioning Combination as illustrated in Appendix C, example 3.
- 8.6 AT&T may also use unbundled network elements to originate and terminate toll traffic. AT&T has identified the following two Combinations which will allow such functionality: Toll Traffic Combination 1, which is comprised of the Network Elements DT (Dedicated Transport) and LS (Local Switching); and Toll Traffic Combination 2, which is comprised of DT (Dedicated Transport), TS (Tandem Switching), CT (Common Transport) and LS (Local Switching). AT&T will order the Toll Traffic Combination 1, as illustrated in Appendix C, example 4.
- 8.7 There are additional Combinations which AT&T may choose to order from USWC. AT&T includes examples of some such additional Combinations and their ordering formats in Appendix C, examples 5 and 6.

### 9. Performance Requirements

9.1 AT&T will specify on each order its Desired Due Date (DDD) for completion of that particular order. Standard intervals do not apply to orders under this Agreement. USWC will not complete the order prior to DDD or later than DDD unless authorized

by AT&T. If the DDD is less than the following element intervals, the order will be considered an expedited order.

INTERVALS FOR ORDER CO	MPLETION
Network Element	Number of Days
LD	2
LC	2
LF.	2
LS	2
OS	2
DT	·
DS0, DS-1, T 1.5 STS-1, DS3/T3 OC-3, +	5* 5 15
SS	3
SL	2
DB	2
TS	2
C-Loop	2
C-Local Switch Conditioning Combination	20

<sup>\*</sup> where facilities are available and ICB when facilities are not available

Note: Dedicated facilities may require extra time. If AT&T wants higher quality than that which USWC provides to itself, it may request the higher service and pay for it in proportion to the benefit it receives.

- 9.2 Within two (2) business hours after an AT&T request for an expedited order, USWC shall notify AT&T of USWC's confirmation to complete, or not complete, the order within the expedited interval. A "business hour" is any hour occurring on a business day between 8 a.m. and 5 p.m. within each respective continental U.S. time zone.
- 9.3 If an order has been issued by AT&T and AT&T subsequently requires a new DDD that is less than the minimum interval defined, AT&T will issue an expedited modify order. USWC will notify AT&T within two (2) business hours of its confirmation to

complete, or not complete, the order requesting the new DDD.

- 9.4 AT&T and USWC will agree to escalation procedures and contacts. USWC shall notify AT&T of any modification to these contacts within one (1) week of such modification.
- 9.5 USWC shall satisfy the following Direct Measures of Quality: (a) at least 90% of all orders must be completed by DDD; (b) at least 98% of all orders must be completed by Committed Due Date; and (c) at least 99% of all orders must be completed without error. Completions should exclude missed commitment dates caused by AT&T's customers. Errors caused by subscribers and where no trouble is found should be excluded.

1) Loop Distribution

			e .			
Characteristics	Special	Conditioning	Connector type			
Object (one of) Option (one of) Characteristics	2-wire	4-wire	Single mode Multi mode		2-wire 4-wire	4-wire/smart jack
Object (one of)	Copper		Fiber	Coax	Stand Alone MI	
Element ID	Loop/circuit ID Copper					
Interconnection Interconnection	CONTIGUOUS					
Interconnection Location	Cust. address	CLLI/POT			-	
Туре	C.J					
Activity (one of)	A,C,D,R		:			

Unbundled Network Element Provisioning Categories

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	oncentra
	Concentra
	Concentra
	op concentral
	COD CONCENTA
	LOOD CONCENITA
	/ Loop Concentral

Characteristics	Interface rate Multiplex from-to interface protocol (TR08, TR303) Framing format Concentration ratio Circuit pack (card) type	Interface rate Multiplex from-to interface protocol (TR08, TR303) Framing format Concentration ratio Circuit pack (card) type	Multiplex from-to Framing format	Multiplex from-to
Options (combination of)	AD conversion Multiplexing Concentration	A/D conversion Multiplexing Concentration	A/D conversion Multiplexing	Multiplexing
Object (one of)	Integrated DLC	Universal DLC	Channel Bank	Multiplexer
Element ID	Equip. CLLI	:		
Interconnection Specific	FUNCTIONALL Y INCLUSIVE			
Interconnection Interconn Location Specific				
Type 1.C	3			
Activity (one of)				

3) Loop Feeder

	adh manna	Multi mode				16-117	100
	Connector type	Single mode	Fiber			-	
	DS1 Conditioned	DSI		Circuit ID		CLLIPOT	
	ISDN Conditioned	DSO	Copper	Facility name Copper	nons	Location CLLI	占
····	Characteristics	Option (one	Object (one of) Option (one Characteristics	Clement IU	Location Specific	Location	
		•				Indendoning the same	7

4) Local Switching

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### Attachment 5 Appendix A, Page 3

Characteristics	Signaling Line Class Code WTN	Concentration Ratio Interface rate (DS1, DS3) Interface protocol (TR08, TR303)	Signaling Line Class Code WTN	E911 Interface rate (DS0, DS1, DS3)	One-way Two-way Routing	Screening TSG	Signaling Routing Screening	56	
Option (one	POTS ISDN Centrex		POTS ISDN Centrex		SS7 MF		DID DOD Two-way	Operator Services Directory	Messaging
Object (one of)	Line (may be Concentrated if so designated)		Non-concentrated Line		Network Trunk		Customer Trunk	Routing	
Element ID	WTN TSG Designation Switch CLLI							<del>                                    </del>	
Interconnection Specific	FUNCTIONALL Y INCLUSIVE ROUTING								
Interconnection Location	WTN Location CLLI Switch CLLI							and a same share was a con-	
Туре	ST								_
Activity (one of)	A,C,D,R								

	Characteristics	Ported number(s) Shadow number(s) Number of cell partes	Subscribed	Office-based Dialing plan Translation type	Digit sequence	Policing Congestion control	Policing Congestion control		
	Option (one of)	RCF DNRI RIPH	LERG Triggers (e.g.	Off-hook immediate, off-hook	(fame)	Switch type (e.g. ATM, Frame Relay)	Switch type (e.g. ATM,	( taille Kelay)	
	Object (one of)	LNP	AIN trigger			UNI Port	Data Switch NNI Port		
	Element ID			:					
	Interconnection Specific								
-	Interconnection Location								
	Type								
	Activity (one of)								

5	Jeraior	Sy operator systems			
Activity	Time	Internation			
, ,	, .	Interconnection	Interconnection	Flomont ID	7,770
(one of)		Location	Checifa		Colect lone
0 C C V	ě		Specific		
というじ	3	Serving area	FINCTIONAL		
			יייייייייייייייייייייייייייייייייייייי		Operator

	Characteristics	מיים מכוני ואווכא	đ	ó	Busy Line Verification	(BLV)	Emergency Line	Interrupt	(ELI)	911 overflow	411
	Option (one	00				•			•		Service Area
	Element ID Object (one of) Option (one		Operator Services	-							Directory
	Element ID										<del></del>
(melanta a maria a maria )	Specific	- 1	Y INCLUSIVE								
	=	Serving gree	(NPA-NXX	LATA, State,	Rate center)						
7 706		SO	}								
	(one of)	A,C,D,R		-							

Unbundled Network Element Provisioning Categories

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	Characteristics		
	Option (one		····
	Object (one of)		
	Element ID		
	Location Specific Element ID Object (one of) Option (one Characteristics	CONTIGUOUS	FUNCTIONALL Y INCLUSIVE
1000011	Location	Serving area	LATA, State, Rate center)
Time		تا تا	
Activity	(one of)	A,C,D,R	

7) Dedicated Transport

	_		_												
	Characteristics		Routing Avoidance	200000000000000000000000000000000000000	A/D Conversion	Multiplexing	Se-munblexing	Cirral conversion	Signal conversion	Performance	monitoring	SONET to Asynch.	gateway	Broadcasting	Mapping
	Option (one of)		No DCS		D4 Channel	Bank DCS 1/0	•								
	Object (one of)		DS0												
	Element ID		racility name	ניי			-								
	Interconnection Specific	CONTRICTIONS	2000011100												
International	Location	Location CI.1.1		CLLIPOT			******								
7,70		DT						-	•				•		
Activity		A,C,D,R DT							-		•		·		

Г	 т-												<u>.                                    </u>
Characteristics	Signal format	(e.g. B8ZS, AMI)	Framing format	(e.g. ESF, D4, unframed)	Multiplexing/	Demultiplexing Format	conversion Signal	conversion	monitoring	SONET to	Asynch.	galeway	Manning
Option (one of)	No DCS					DCS 1/0 DCS 3/1							
Object (one of)	 183				-								
Element ID													
Interconnection Specific													
Interconnection Location					No. some as solve								
1ype			-								<u></u>		
(one of)											<del>-</del>		

Appen					<del></del>	<u> </u>	
	Characteristics	Secure Interface Framing format (e.g. C-bit parity, M13, unframed)	Multiplexing/ Demultiplexing Format conversion Signal	conversion Performance monitoring SONET to	gateway Broadcasting Mapping		
Unbundled Network Element Provisioning Categories	Option (one of)	No DCS	DSX DCS 3/1 DCS 3/3				TGX
ement Provis	Object (one of)	DS3				VTI.5	STSn
Network El	Element ID				,		· ·
Unbundled	Interconnection Specific						
	Interconnection Location	and the second s					
	Туре						
	Activity (one of)						

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					:
		Characteristics			
DS0 DS1		Option (one of)	DS0	DSI	DS0
D-link interface (quad)		Object (one of)	Pair		Quad
		Element ID	Facility name	Circuit ID	
	Ĕ	Interconnection Specific	CONTIGUOUS		
	Link Transport	Interconnection Location	Location CLLI	CLLIPOT	
	9) Signaling	Туре	SF		
	) Sig	Activity (one of)	A,C,D,R		

Attachment 5 Appendix A, Page 9

	n		····		7	<del></del>		T
	Characteristics	One-way Two-way	Routing	TSG				Overflow
	Option (one of)	SS7 MF			Operator Services	Directory Assistance	Messaging	RIPH
	Object (one of)	Network Trunk			Routing			LNP
	Element ID	Switch CLLI						
	Interconnection Specific	FUNCTIONALL Y INCLUSIVE	ROUTING					
Switching	Activity Type Interconnection (one of) Location	Serving area (NPA-NXX, LATA, State,	Rate center)	Location CLLI				
Tandem	Туре	TS						
11)	Activity (one of)	A,C,D,R						

Example 1

Purpose of Order: Modify Dedicated transport order, Customer PBX to AT&T 4ESS

Modify X Cancel Expedite Suspend Restore			From: [Customer prem CLLI] To: [AT&T CFA T3 slot]	on Specific: CONTIGUOUS		Remarks: Order modified to reflect different CFA assignment
Order Activity Description:   Modify X Cancel		Type Element/Comb: E-DT	Interconnection Location:	Interconnection Specific:	Due Date Details:	Remarks:
<b>.</b>	**************************************		Paratiaban .		11/03/96	
Order Activity:					Desired Due 11/03/96 Date:	

Element Combination: DT . Dedicated Transport

Element ID:	LEC will return facility name,
Object:	
Oty/Capacity:	
Option:	Framing: D4
Characteristics :	Signal: B8ZS
Features:	

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### Example 2

Purpose of Order: Route PBX customer's traffic from end-office to PBX trunk g

The state of the s	Modify Cancel Expedite Suspend Beston	:		From: [LEC Switch CLLI] To: [LEC-Switch to Area.	ROUTING ROUTING	Date Details: Activate routing in coordination with AT&T contact	
	Order Activity Description: Modify		Type Element/Comb: E-LS	Interconnection Location:	Interconnection Specific: ROUTING	Due Date Details:	Remarks:
	Order Activity; C				Desired	Date:	

ElementCombination: LS - Local Switching

i. [LEC Switch CLLI]	": LNP	: N/A	RIPH (Route Index Portability Hub)	[Ported Numbers] Number of call paths: max		
Element ID:	Object:	Oty/Capacity:	Option:	Characteristics :	Features:	

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Example 3

Purpose of Order: Suspend Local Switching functionality

NOW  NOW  Due Date Details:  Sequence  Sequence  Sequence  Sequence  Sequence  Interconnection Location: Inclusive: [LE  Interconnection Specific: FUNCTIONALL  Remarks: Suspend all functional states and sequence  Remarks: Suspend all functional states and sequence  Remarks: Suspend all functional states are sequenced.	Order Activity:	د	O. J	
Type Element/Comb: E - LS		<b>)</b>	Order Activaly Description:	Cancel Expedite
Type Elem Interconnection Interconnection NOW Due Da				Coordinated Ass
Interconnection Interconnection NOW Due Da		J 1887 1 - 1 - 1	Type Element/Comb:	E-LS
NOW Due Da				
NOW Due Da			Interconnection Specific:	FUNCTIONALLY INCLUSIVE
Remarks: Suspend all functionally except access to E911	Desired Due Date:	MOM	Due Date Details:	
			Remarks:	Suspend all functionally except access to E911

Element/Combination: LS - Local Switching

WTW	Line		POTS		
Element ID:	Object: Line	Oty/Capacity:	Option:	Characteristics :	Features:

Example 4

Purpose of Order: Add LEC signaling access/capability to AT&T Switch

Order Activity:	∠	Order Activity Description: Modify	Modify Cancel Expedite Suspend Restore
			Sequence Coordinated X Associated Order(s):
		Type Element/Comb: B - SS	B-SS
	- despesable se se	Interconnection Location:	Inclusive: [Rate Center] From: [STP CLLI pair] To: [AT&T POP CLLI and DSX tie down]
		Interconnection Specific:	on Specific: CONTIGUOUS, FUNCTIONALLY INCLUSIVE, ROUTING
Desired Due Date:	11/03/96	Due Date Details:	Turn up signaling network in coordination with AT&T contact
	, , <b>-</b>	Remarks:	

Element/Combination: SS -Signal Transfer Points

	Element ID:	ISTP CLLI pair)
Object: A-link Oty/Capacity: 2 (pair) Option: DS0 Characteristics :		[Circuit ID's for links]
Oty/Capacity: 2 (pair) Option: DS0 Characteristics : Features:	Object:	A-link
	Qty/Capacity:	2 (pair)
Characteristics : Features:	Option:	DSO
Features:	Characteristics	
Features:	•	
	Features:	

### Example 5

Purpose of Order: Update ALIDMS (E911) database with new customer information

				TOTAL .
	Order Activity:	vity:	Order Activity Description: Modity	Cancel Expedite Suspend
		1		Sequence Coordinated X
_		***************************************	Type Element/Comb;	E-DB
			Interconnection Location:	m: Inclusive: [Rate Center control b. 1: 1
			Interconnection Specific:	
	Desired Due Date:	ue   11/03/96 !e:	Due Date Details:	5: Activate new database entry in conditions
			Remarks:	s:
• •	Element/Combi	Element/Combination: DB - SCPs/Database	Ps/Database	
	Element ID:	WTW		
<b></b>	Object:	Object: E911 (ALVDMS)	8)	
<u></u>	Qty/Capacity:			
	Option:	Customer		

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[New customer-specific information]

Characteristics

Features:

Example 4

Purpose of Order: Add LEC signaling access/capability to AT&T Switch

Order Activity: A Order Act	Order Activity Description:   Modify	Modify Cancel Expedite Suspend Restore
		Sequence Coordinated X Associated Order(s):
Lyp	Type Element/Comb: E - SS	E-SS
Interconnection	Location:	Inclusive: [Rate Center] From: [STP CLLI pair] To: [AT&T POP CLLI and DSX tie down]
Interconnection	Specific:	* Specific: CONTIGUOUS, FUNCTIONALLY INCLUSIVE, ROUTING
Desired Due 11/03/96 L	Due Date Details:	Due Date Details: Turn up signaling network in coordination with AT&T contact
	Remarks:	

Element/Combination: SS -Signal Transfer Points

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Example 5

Purpose of Order: Update ALIOMS (E911) database with new customer information

	Order Activity:	ığı:	Order Activity Descrit	
			Description;	Modify Cancel Expedite Suspend Restore
		t in the Property of the State	Type Element/Comb:	E-DB
		A STATE OF THE STA	Interconnection Location:	Inclusive: [Rate Center served by ALI/DMS database]
			Interconnection Specific:	FUNCTIONALLY INCLUSIVE
	Desired Due Date:	ue 11/03/96	Due Date Details:	Activate new database entry in coordination with AT&T contact
			Remarks:	Tablico - march
Elem	ent/Combin	Element/Combination: DB - SCPs/Database	Ps/Database	
E	Element ID:	WTW		
	Object:	E911 (ALL/DMS)	(S)	
<b>G</b>	Oty/Capacity:	_		
	Option:	Customer		
Chara	Characteristics:	[New customer-specific information]	specific	
1	Features:		T	

Example 6

Purpose of Order: Disconnect Local Switching

	Remarks:		
Due Date Details: Disconnect in coordination with AT&T contact	Due Date Details:	11/03/96	Desired Due 11/03/96 Date:
ion Specific: FUNCTIONALLY INCLUSIVE	Interconnection Specific:		
Interconnection Location: Inclusive: [LEC Switch CLLI]	Interconnection Location:		
в. DВ	Type Element Comb: E - DB	riilgaddis (s) - 170 tu	
Sequence Coordinated X Associated Order(s):			
Modify Cancel Expedite Suspend Restore	Order Activity Description: Modify	۵	Order Activity:

Element/Combination: LS - Local Switching

Object: Line OtyCapacity: 1 Option: POTS Characteristics	
Features:	

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## Loop Combination Functionality

		<u> </u>
Characteristics	ISDN Conditioned DS1 Conditioned Non-concentrated Max-concentration Interface rate Interface protocol (TR08, TR303)	Non-concentrated Max-concentration Interface rate Interface protocol (TR08, TR303) Analog interface Digital interface
Option (one of)	2-wire 4-wire	2-wire 4-wire
Object (One of)	Digital	Analog
Element ID	Loop ID	
Interconnection Specific	CONTIGUOUS	
Interconnection n Location	Customer Address LSO CLLI/POT	
adí.	d007	
(one of)	A,C,D,R	

Example 1

Purpose of Order: LOOP Combination - Add ISDN Loop Combination

Modify Cancel Expedite Suspend Restore	Sequence Coordinated X Associated Order(s);		From: [Customer location] To: [LSO CLLI, AT&T DSX frame tie down!	CONTIGUOUS	Due Date Details: Swing loop in coordination with AT&T contact	
Order Activity Description: Modify		Type Element/Comb: C-LOOP	Interconnection Location:	Interconnection Specific: CONTIGUOUS	Due Date Details:	Remarks:
<b>∢</b>	<u>.</u>				11/03/96	'
Order Activity:					Desired Due 11/03/96 Date:	

Element/Combination: LOOP - Loop

				٠.	
[LEC will return Loop ID]	Digital	· Ald middle	2-wire	ISDN conditioned Non-concentrated Interface rate: DSI Interface protocol: TR 303	
Element ID:	Object:	Qty/Capacity:	Option:	Characteristics :	Features:

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Example 2

Purpose of Order: LOOP and Switching Combination

Order Activity:	<u>ح</u>	Order Activity Description:	escription: Mo	Modify Cancel Expedite Suspend Bestall
		,	Sec	
	of four a long	Type Element/Comb:		- 1
	y makin, my	Interconnection	Location: Fr	From: [Customer prem] To: [LSO CLL! AT&T INE
		Interconnection Specific:	15	CONTIGUOUS, ROUTING
Desired Due Date:	11/03/96	Due Date	Due Date Details: Swi	Swing loop and activate remote call forward elmultaness.
		1	Remarks:	Visionisti
Element/Combination: LOOP - Loop	ation: LOOP -	Loop	Element/Com	Element/Combination: LS - Local Switching
i				
Element ID:	[LEC will return loop ID]	rn loop ID]	Element ID:	ILEC Switch CLLI1
	Analog		Object:	
Qty/Capacity:	~		Qty/Capacity:	: N/A
Option:	2-wire		Option:	RCF
Characteristics	Interface: Analog		Characteristics:	[Shadow number]
Features:				-
			Features:	

Unbundled Combination Provisioning Format

Example 3

Purpose of Order: Local Switching Conditioning Combination

	LANA.		
Order Activity:	∢	Order Activity Description: Modify	Modify Cancel Expedite Suspend Restore
See ee			Sequence Coordinated Associated Order(s):
	n sept minutes -	Type Element/Comb:	Type Element/Comb: C - LS/CT/SS/DB/TS
		Interconnection Location:	Inclusive: [NPA]
		Interconnection Specific:	Interconnection Specific: FUNCTIONALLY INCLUSIVE
Desired Due Date:	11/03/96	Due Date Details:	
		Remarks:	Prepare NPA for AT&T use of all Local Switching, Common Transport, Signaling, Database and Tandem Switching elements.
			Return AT&T Line Class Codes for all switches

Example 4

Purpose of Order: Toll Traffic Combination 1 - Add toll trunking and transport between LEC end office and AT&T Switch

Order Activity:	- 4	Onder And it. P.			
	<b>.</b>	Order Activity Description: Modify	iption:   Modif	y Cancel Expedite Suspend Restore	
			Sequence	nce Coordinated X Associated Order(s);	
	al trace	Type Element	Type Element/Comb: C - DT/LS		
		Interconnection Location:		From: [LEC Switch CLLI] To: [CFA T3 slot]	
		Interconnection Specific:	ecific: CONTI	CONTIGUOUS, FUNCTIONALLY INCLUSIVE, ROUTING	
Desired Due Date:	11/03/96	Due Date Details:	etails: Do not	Do not activate routing until notified by AT&T contact	
		Rem	Remarks:		
ElemenUCombin	ation: DT - De	Elemen/Combination: DT - Dedicated Transport	Element/Combin	Element/Combination: LS - Local Switching	
Element ID:	[LEC will reti CLFI]	Element ID: [LEC will return facility name,	Element ID:	Element ID: [LEC will return TSG	
Object:	DSI		Object:	Network Trunk	
Qty/Capacity:	_		Qty/Capacity: 24	24	

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Two-way [Screening] [TSG characteristics] [Routing]

Option:

Framing: ESF

Option:

Characteristics | Signal: B82S

Features:

Characteristics:

Example 5

Purpose of Order: Cancel order to Add trunking and transport between LEC end-offic

Sowitch	dite Suspend Restore	Associated Order(s);	T. Box of	USIVE										
Terror Mines LEC end-office and AT&T OSPS Switch	m: Modify Cancel X Expedite	┵—	From: [LEC Switch CLLi] To: [AT&T BOX 61	$\mathcal{L}$	<del>-</del>		Element/Combination: 1 5 - 1	Social Switching	Element ID: [LEC will return TSG	Object: Network Trunk	Qty/Capacity: 48	Option: SS7	 [TSG characteristics]	Features:
	Order Activity: A Order Activity Description:	Type Element/Comb;	Interconnection Location:	Desired Due 11/03/96	Date: Details:	Remarke	Element/Combination: DT - Dedicated Transport Element	Element ID: ILEC will reform 6		23	Framine: D4	Signal: Dozn	 Features:	

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### Attachment 6

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### MAINTENANCE

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MAINTENANCE	1

### MAINTENANCE

- 1. USWC shall provide repair, maintenance, testing and surveillance for all Local Services and unbundled Network Elements and Combinations at parity with the level USWC provides itself.
- 2. USWC shall cooperate with AT&T to meet maintenance standards for all Local Services and unbundled Network Elements and Combinations ordered under this Agreement, as specified in Section 9 of this Attachment. Such maintenance standards shall include, without limitation, standards for testing, network management, call gapping, and notification of upgrades as they become available.
- USWC and AT&T agree to work together in the OBF to establish uniform industry 3. standards for such Electronic Interfaces. Until such time as such standards have been developed and implemented, USWC shall cooperate with AT&T to establish a real-time, Electronic Interface for gateway or automated access by AT&T to USWC's maintenance systems and databases, in order to allow AT&T maintenance personnel and customer service representatives to perform the following functions for AT&T customers: the ability to enter a new trouble ticket into the USWC maintenance system for an AT&T customer, the ability to retrieve and track current status on all AT&T customer repair tickets; the ability to receive "estimated time to repair" ("ETTR") on a real-time basis; the ability to receive immediate notification in the event a repair person is unable to be present for, or anticipates missing, a scheduled repair appointment; the ability to retrieve all applicable time and material charges at the time of ticket closure (itemized by time spent, price of materials used, procedures employed, amounts incurred in each such category, and total by customer, per event); and the ability to confirm dispatch and ticket closure. The Parties shall agree upon a ticket closure procedure.
- 4. USWC technicians shall provide repair service that is at least equal in quality to that provided to USWC customers; trouble calls from AT&T customers shall receive response time priority that is at least equal to that of USWC customers and shall be handled on a "first come, first served" basis regardless of whether the customer is an AT&T customer or a USWC customer.
- 5. USWC shall provide AT&T with the same scheduled and non-scheduled maintenance, including required and recommended maintenance intervals and procedures, for all Local Services, Network Elements and Combinations provided to AT&T

under this Agreement that USWC currently provides for the maintenance of its own network. USWC shall provide AT&T at least sixty (60) days' advance notice of any scheduled maintenance activity which may impact AT&T's customers. Scheduled maintenance shall include, without limitation, such activities as, switch software retrofits, power tests, major equipment replacements and cable rolls. Plans for scheduled maintenance shall include, at a minimum, the following information: location and type of facilities, specific work to be performed, date and time work is scheduled to commence, work schedule to be followed, date and time work is scheduled to be completed, estimated number of work-hours for completion.

- 6. USWC shall advise AT&T of all non-scheduled maintenance, testing, monitoring, and surveillance activity to be performed by USWC on any Network Element, including, without limitation, any hardware, equipment, software or system, providing service functionality which may potentially impact AT&T customers. USWC shall provide the maximum advance notice of such non-scheduled maintenance and testing activity possible, under the circumstances; provided, however, that USWC shall provide emergency maintenance as promptly as possible to maintain or restore service and shall advise AT&T promptly of any such actions it takes.
- USWC shall provide AT&T with a detailed description of any and all emergency 7. restoration plans and disaster recovery plans, however denominated, which are in place during the term of this Agreement. Such plans shall include, at a minimum: (a) provision for immediate notification to AT&T of the existence, location, and source of any emergency network outage potentially affecting an AT&T customer, via the Electronic Interface to be established pursuant to Section 3 of this Attachment 6: (b) establishment of a single point of contact responsible for initiating and coordinating the restoration of all Local Services and Network Elements or Combinations; (c) methods and procedures to provide AT&T with real-time access to information relating to the status of restoration efforts and problem resolution during the restoration process; (d) an inventory and description of mobile restoration equipment, by location; (e) methods and procedures for the dispatch of mobile equipment to the restoration site; (f) methods and procedures for reprovisioning all Local Services and Network Elements or Combinations after initial restoration; (g) equal priority, as between AT&T customers and USWC customers, for restoration efforts, consistent with FCC Service Restoration guidelines, including deployment of repair personnel and access to spare parts and components; and (h) a mutually agreeable process for escalation of maintenance problems, including a complete, up-to-date list of responsible contacts, each available twenty-four (24) hours per day, seven (7) days per week. Said plans shall be modified and up-dated as needed. For purposes of this Section, an emergency network outage is defined as 5,000 or more blocked call attempts in a ten (10) minute period in a single exchange.

- 8. USWC and AT&T shall establish mutually acceptable methods and procedures for the immediate, on-line transfer from USWC to AT&T, and vice versa, of any and all misdirected calls from customers requesting repair.
- 9. USWC's repair bureau shall conform to the following performance and service quality standards when providing repair and maintenance to AT&T and AT&T customers under this Agreement:
- 9.1 If service is provided to AT&T customers before an Electronic Interface is established between AT&T and USWC, AT&T will transmit repair calls to the USWC repair bureau by telephone. In such event, USWC shall treat calls transferred from AT&T in the same manner it handles calls dialed directly into its repair bureaus.
  - 9.2 Intentionally deleted.
- 9.3 The USWC repair bureau shall provide to AT&T the "estimated time to restore," with at least ninety-two percent (92%) percent accuracy.
- 9.4 In the event the "estimated time to restore" has been missed, USWC shall notify AT&T to that effect within one (1) hour prior to missed time.
- 9.5 Emergency network outages, as defined in Section 7 preceding, shall be restored within one (1) hour of being discovered or reported. If USWC cannot meet this deadline, it must provide AT&T with the reasons. The only exception to this shall be in the case of a Force Majeure event affecting an entire exchange.
  - 9.6 Intentionally deleted.
- 9.7 Trouble calls (e.g., related to Local Service or Network Element or Combination degradation or feature problems) which have not resulted in total service outage shall be resolved within twenty-four (24) hours of referral, ninety-five percent (95%) of the time, irrespective of whether or not resolution requires a premises visit. For purposes of this Section, Local service or a Network Element or Combination is considered restored, or a trouble resolved, when the quality of the Local Service or Network Element or Combination is equal to that provided before the outage, or the trouble, occurred.
  - 9.8 Intentionally deleted.
- 9.9 USWC shall provide progress reports and status of repair efforts to AT&T upon request, and at a frequency interval to be determined by AT&T. USWC shall inform

AT&T within ten (10) minutes of restoration of Local Service or Network Element or Combination after an outage has occurred.

- 9.10 Intentionally deleted.
- 9.11 These quality standards shall be subject to review at least quarterly and subject to modification upon mutual consent.
- 9.12 USWC shall provide AT&T with escalation procedures to be followed if, in AT&T's judgement, any individual trouble ticket or tickets are not resolved in a timely manner. The escalation procedures to be provided hereunder shall include names and telephone numbers of USWC management personnel who are responsible for maintenance issues.
- 9.13 In the event USWC shall fail to conform to the aforementioned performance and service quality standards, AT&T may request, and USWC shall perform, a root cause analysis of the reason behind USWC 's failure to conform, and USWC shall correct said cause as soon as reasonably practical, at its own expense.
- 9.14 Maintenance charges for premises visits by USWC technicians shall be billed by AT&T to its customer, and not by USWC. The USWC technician shall, however, present the customer with a form detailing the time spent, the materials used, and an indication that the trouble has either been resolved, or that additional work will be necessary, in which case, the USWC technician shall make an additional appointment with the customer. The USWC technician shall obtain the customer's signature upon said form, and then use the signed form to input maintenance charges into USWC's repair and maintenance database (accessible by way of the Electronic Interface established pursuant to Section 3 preceding).
- 9.15 Dispatching of USWC technicians to AT&T customer premises shall be accomplished by USWC pursuant to a request received from AT&T. The Electronic Interface established pursuant to Section 3 preceding shall have the capability of allowing AT&T to receive trouble reports, analyze and sectionalize the trouble, determine whether it is necessary to dispatch a service technician to the customer's premises, verify any actual work completed on the customer's premises, review test results, and review the history of all trouble reports. USWC and AT&T will establish a trouble priority and severity coding format for all trouble reports. USWC shall participate in a joint operations process management team to create methods and procedures and operational understanding to bring unbundled elements into life cycle management for both provisioning and maintenance.

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### CONNECTIVITY BILLING AND RECORDING

### 1. General

This Section describes the requirements for USWC to bill and record all charges AT&T incurs for purchasing Local Services for resale and for Network Elements and Combinations, and to provide Meet Point Billing and Mutual Compensation.

### 2. Billable Information And Charges

- USWC will bill and record in accordance with this Agreement those Combinations 2.1 charges AT&T incurs as a result of AT&T purchasing from USWC Network Elements, Combinations and Local Services, as set forth in this Agreement (hereinafter "Connectivity Charges"). Each bill for Connectivity Charges (hereinafter "Connectivity Bill") shall be formatted in accordance with CABS or SECAB using the billing output specification ("BOS") format. USWC may use its integrated access billing system ("IABS") to fulfill its obligations under this Section. Each such Element, Combinations or Local Service purchased by AT&T shall be assigned a separate and unique billing code in the form agreed to by the Parties and such code shall be provided to AT&T on each Connectivity Bill in which charges for such Elements, Combinations or Local Services appear. Each such billing code shall enable AT&T to identify the Element(s) or Combinations, Objects and Options ordered by AT&T, as described in the Provisioning Attachment to this Agreement, or Local Services ordered or utilized by AT&T in which Connectivity Charges apply pursuant to this Agreement. Each Connectivity Bill shall set forth the quantity and description of each such Element, Combinations or Local Service provided and billed to AT&T. All Connectivity Charges billed to AT&T must indicate the state from which such charges were incurred.
- 2.2 USWC shall provide AT&T a monthly Connectivity Bill that includes all Connectivity Charges incurred by and credits and/or adjustments due to AT&T for those Network Elements, Combinations or Local Services ordered, established, utilized, discontinued or performed pursuant to this Agreement. Each Connectivity Bill provided by USWC to AT&T shall include: (a) all non-usage sensitive charges incurred for the period beginning with the day after the current bill date and extending to, but not including, the next bill date, (b) any known unbilled non-usage sensitive charges for prior periods, (c) unbilled usage sensitive charges for the period beginning with the last bill date and extending up to, but not including, the current bill date, (d) any known unbilled usage sensitive charges for prior periods, and (e) any known unbilled adjustments.
- 2.3 The Bill Date, as defined herein, must be present on each bill transmitted by USWC

- to AT&T. Connectivity Bills shall not be rendered for any Connectivity Charges incurred under this Agreement on or before one (1) year preceding the Bill Date. In addition, on each bill where "Jurisdiction" is identified, local and local toll charges shall be identified as "Local" and not as interstate, interstate/ interLATA, intrastate, or intrastate/intraLATA.
- 2.4 USWC shall bill AT&T for each Element, Combinations or Local Service, supplied by USWC to AT&T pursuant to this Agreement at the rates set forth in this Agreement. USWC will bill AT&T based on the actual Connectivity Charges incurred; provided, however, that for those usage-based Connectivity Charges where actual charge information is not determinable by USWC because the jurisdiction (i.e., interstate, interstate/interLATA, intrastate, intrastate/intraLATA, local) of the traffic is unidentifiable, the Parties will jointly develop a process to determine the appropriate charges. Measurement of usage-based Connectivity Charges shall be in actual conversation seconds. For each Element or Combination, the total conversation seconds per chargeable traffic types will be totaled for the entire monthly bill cycle and then rounded to the next whole minute. For Local Service, the total conversation seconds per chargeable traffic type will be based on a per message rounding of seconds and then totaled for the entire monthly billing cycle.
- 2.5 Except as otherwise specified in this Agreement, each Party shall be responsible for (a) all costs and expenses it incurs in complying with its obligations under this Agreement, and (b) the development, modification, technical installation and maintenance of any systems or other infrastructure which it requires to comply with and to continue complying with its responsibilities and obligations under this Agreement.
- 2.6 Each Party shall provide the other Party, at no additional charge, a contact person for the handling of any Connectivity Billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Attachment.

## 3. Meet Point Billing

- 3.1 AT&T and USWC will establish meet-point billing ("MPB") arrangements in accordance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as modified herein. Both Parties will use their best reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association ("NECA") Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, in MECAB and in MECOD.
- 3.2 AT&T and USWC will implement the "Multiple Bill/Multiple Tariff" option in order to bill any interexchange carrier ("IXC") for that portion of the Network Elements

provided by AT&T or USWC. For all traffic carried over the MPB arrangement, AT&T and USWC shall bill each other all for applicable elements at the rates specified in this Agreement.

- 3.3 USWC shall provide to AT&T the billing name, billing address, and carrier identification code ("CIC") of the IXCs that may utilize any portion of AT&T's network in an AT&T/ USWC MPB arrangement in order to comply with the MPB Notification process as outlined in the MECAB document. Such information shall be provided to AT&T in the format and via the medium agreed to by the Parties. If USWC does not have a CIC for any IXC that will utilize a portion of AT&T's network in an AT&T/ USWC MPB arrangement, and for whom USWC must supply to AT&T MPB billing information, USWC agrees that it will assist such carrier in obtaining a CIC expeditiously. Until such carrier has obtained a CIC, USWC will submit LEC's CIC on those MPB records provided to AT&T for MPB. USWC understands and agrees that it will be solely responsible for obtaining any reimbursements from those carriers who have utilized the jointly provided networks of USWC and AT&T.
- 3.4 USWC and AT&T agree that in an MPB arrangement where one Party provides local transport and the other Party provides the end office switching, the Party who provides the end office switching is entitled to bill any residual interconnection charges ("RIC") and common carrier line ("CCL") charges associated with the traffic. The Parties further agree that in those MPB situations where one Party sub-tends the other Party's access tandem, the Party providing the access tandem is only entitled to bill the access tandem fee and any associated local transport charges. The Parties also agree that the Party who provides the end office switching is entitled to bill end office switching fees, local transport charges, RIC and CCL charges, as appropriate, and such other applicable charges.
- 3.5 USWC and AT&T will record and transmit MPB information in accordance with the standards and in the format set forth in this Attachment. USWC and AT&T will coordinate and exchange the billing account reference ("BAR") and billing account cross reference ("BACR") numbers for the MPB arrangements described in this Agreement. Each Party will notify the other if the level of billing or other BAR/BACR elements change, resulting in a new BAR/BACR number.
- 3.6 If MPB data is not processed and delivered by either USWC or AT&T and sent to the other Party within ten (10) days of their recording and, if, as a result, such Party is unable to bill the IXC for the appropriate charges, the Party who failed to deliver the data will be held liable for the amount of the unbillable charges.
- 3.7 If MPB data is not submitted within ten (10) days of its recording or is not in the proper format as set forth in this Agreement, and if, as a result, the other Party is delayed in billing the IXC for the appropriate charges it incurs, the delaying Party shall pay

the other Party a late MPB data delivery charge which will be the total amount of the delayed charges times the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the date the MPB charges should have been received to and including the date the MPB charge information is actually received.

- 3.8 Errors in MPB data exchanged by the Parties may be discovered by AT&T, USWC or the billable IXC. Both AT&T and USWC agree to provide the other Party with notification of any discovered errors within two (2) business days of the discovery. The other Party shall correct the error within eight (8) business days of notification and resubmit the data. In the event the errors cannot be corrected within the time period specified above, the erroneous data shall be considered lost. If MPB data is lost due to incorrectable errors or otherwise, the Parties shall follow the procedures set forth in the Customer Billing Data Attachment of this Agreement and compensate the other for the lost MPB billing data.
- 3.9 In the event AT&T purchases from USWC Network Elements or Combinations, in a LATA other than the LATA to or from which the MPB services are homed and in which USWC operates an access tandem, USWC shall, except in instances of capacity limitations, permit and enable AT&T to sub-tend the USWC access tandem switch(es) nearest to the AT&T rating point(s) associated with the NPA-NXX(s) to/from which the MPB services are homed. In instances of capacity limitation at a given access tandem switch, AT&T shall be allowed to sub-tend the next-nearest USWC access tandem switch in which sufficient capacity is available. The MPB percentages for each new rating point/access tandem pair shall be calculated in accordance with MECAB and MECOD.
- 3.10 Neither AT&T nor USWC will charge the other for the services rendered, or for information provided pursuant to Section 4 of this Attachment except those MPB charges specifically set forth herein. Both Parties will provide the other a single point of contact to handle any MPB questions.

### 4. Collocation

4.1 When AT&T collocates with USWC in a USWC facility as described in this Agreement, capital expenditures (e.g., costs associated with building the "cage"), shall not be included in the Connectivity Bill provided to AT&T pursuant to this Attachment. All such capital expenses shall be given a unique BAN (as defined in Section 7, below) and invoice number. All invoices for capital expenses shall be sent to the location specified by AT&T for payment. All other non-capital recurring collocation expenses shall be billed to AT&T in accordance with this Agreement. The CABS Billing Output Specifications ("BOS") documents provide the guidelines on how to bill the Connectivity Charges associated with

collocation. The bill label for those collocation charges shall be entitled "Expanded Interconnection Service". For those non-mechanized connectivity bills formatted according to SECAB, the bill label for non-capital recurring collocation expenses shall be entitled "Collocation".

### 5. Mutual Compensation

5.1 The Parties shall bill each other reciprocal compensation in accordance with the standards set forth in this Agreement for traffic terminated to the other Party's customer, where both such customers bear NPA-NXX designations associated with the same LATA or other authorized area (e.g., extended area service zones in adjacent LATAs), including those traffic types that have been traditionally referred to as "local calling" and as "extended area service (EAS)". Such traffic shall be recorded and transmitted to AT&T in accordance with this Attachment. Further, the traffic exchanged pursuant to this Attachment shall be measured in billing minutes of use and shall be in actual conversation seconds. The total conversation seconds per chargeable traffic type will be totaled for the entire monthly billing cycle and then rounded to the next whole conversation minute. Reciprocal compensation for the termination of this traffic shall be charged at rates specified in Part V of the General Terms and Conditions of this Agreement.

### 6. Local Number Portability

- 6.1 In accordance with the terms and conditions set forth in this Attachment 6, USWC shall record and provide to AT&T all detail information associated with a call to an AT&T local exchange customer whose telephone number has been ported from USWC under INP as further described in Attachment 9, the Local Number Portability Attachment to this Agreement.
- 6.2 The terminating carrier shall receive the CCL charge, end office charges (primarily the local switching charge), the transport interconnection charge, and some portion of the tandem switched transport element, depending on the distance from switch to switch. The tandem switching carrier shall receive the balance of the tandem switched transport element and all of the tandem switching and entrance facility charges.

# 7. Issuance of Connectivity Bills - General

7.1 USWC and AT&T will issue all Connectivity Bills in accordance with the

4/11/97

terms and conditions set forth in this Section. USWC and AT&T will establish monthly billing dates ("Bill Date") for each Billing Account Number ("BAN"), as further defined in the CABS/SECAB documents, which Bill Date shall be the same day month to month. Each BAN shall remain constant from month to month, unless changed as agreed to by the Parties. Each Party shall provide the other Party at least thirty (30) calendar days' written notice prior to changing, adding or deleting a BAN. The Parties will provide one Connectivity Billing invoice associated with each BAN. Each invoice must contain an invoice number (which will vary from month to month). On each bill associated with a BAN, the appropriate invoice number and the charges contained on such invoice must be reflected. All Connectivity Bills must be received by the other Party no later than ten (10) calendar days from the Bill Date and at least twenty (20) calendar days prior to the payment due date (as described in this Attachment), whichever is earlier. Any Connectivity Bill received on a Saturday, Sunday or a day designated as a holiday by the Chase Manhattan Bank of New York will be deemed received the next business day. If either Party fails to receive Connectivity Billing data and information within the time period specified above, the payment due date will be extended by the number of days the Connectivity Bill is late.

- 7.2 USWC and AT&T shall issue all Connectivity Bills containing such billing data and information in accordance with CABS Version 26.0 or SECAB Issue 4, or such later versions of CABS or SECAB as are published by Bellcore, or its successor, using the billing output specification ("BOS") format, except that if the Parties enter into a meet-point billing arrangement, such Connectivity Billing data and information shall also conform to the standards set forth in the MECAB document, or such later versions as are adopted by Bellcore, or its successor. To the extent that there are no CABS, SECAB, or MECAB standards governing the formatting of certain data, the Parties shall mutually agree on the data format to use. USWC may use its integrated access billing system ("IABS") to fulfill its obligations under this Section.
- 7.3 Each Party will provide the other Party written notice of which Connectivity Bills are to be deemed the official bills to assist the Parties in resolving any conflicts that may arise between the official bills and other bills received via a different media which purportedly contain the same charges as are on the official bill. If either Party requests an additional copy(ies) of a bill, such Party shall pay the other Party a reasonable fee per additional bill copy, unless such copy was requested due to errors, omissions, or corrections or the failure of the transmission to comply with the specifications set forth in this Agreement.
- 7.4 To avoid transmission failures or the receipt of Connectivity Billing information that cannot be processed, the Parties shall provide each other with their respective process specifications and edit requirements. AT&T shall comply with USWC's processing specifications when AT&T transmits Connectivity Billing data to USWC. USWC

shall comply with AT&T's processing specifications when USWC transmits Connectivity Billing data to AT&T. AT&T and USWC shall provide each other reasonable notice if a Connectivity Billing transmission is received that does not meet such Party's specifications or that such Party cannot process. Such transmission shall be corrected and resubmitted to the other Party, at the resubmitting Party's sole expense, in a form that can be processed. The payment due date for such resubmitted transmissions will be twenty (20) days from the date that the transmission is received in a form that can be processed and that meets the specifications set forth in this Attachment.

### 8. Electronic Transmissions

8.1 USWC and AT&T agree that each Party will transmit Connectivity Billing information and data in the appropriate CABS or SECAB format electronically via CONNECT:Direct (formerly known as Network Data Mover) to the other Party at the location specified by such Party. The Parties agree that a T1.5 or 56kb circuit to Gateway for Connect: Direct is required. AT&T data centers will be responsible for originating the calls for data transmission via switched 56kb or T1.5 lines. If USWC has an established CONNECT:Direct link with AT&T, that link can be used for data transmission if the location and applications are the same for the existing link. Otherwise, a new link for data transmission must be established. USWC must provide AT&T its CONNECT: Direct Node ID and corresponding VTAM APPL ID before the first transmission of data via CONNECT:Direct. AT&T's CONNECT: Direct Node ID is

and must be included in USWC's CONNECT:Direct software. AT&T will supply to USWC its RACF ID and password before the first transmission of data via CONNECT:Direct. Any changes to either Party's Connect: Direct Node ID must be sent to the other Party no later than twenty-one (21) calendar days before the changes take effect.

8.2 The following dataset format shall be used as applicable for those Connectivity Charges transmitted via CONNECT:DIRECT in CABS format:

Production Dataset - CABS Format

AF25.AXXXXYYY.AZZZ.DDDEE

AF25. = Job Naming Convention

AXXXX = Numeric Company Code

YYY = USWC Remote

.AZZZ = RAO (Revenue Accounting Office)

.DDD =.BDT (Billing Data Tape W/ Or W/O CSR)

CSR (Customer Service Record) EE = 01 (Bill Period) (optional) thru
31(Bill Period) (optional)
or
GA (US Postal-State Code)

## Test Dataset - CABS Format AF25.ATEST.AXXXX.DDD

AF25.ATEST. = Job Naming Convention AXXXX = Numeric Company Code DDD = .BDT (Billing Data Tape W/ Or W/O CSR) or CSR (Customer Service Record)

8.3 The following dataset format should be used as applicable for those Connectivity Charges transmitted via CONNECT:Direct in SECAB format.

Production Dataset - SECAB Format AFSC.AXXXXYYY.A000.SECAB AFSC. = Job Naming Convention

AXXXX = Numeric Company Code YYY = Alpha Company Name

Test Dataset - SECAB Format
AFSC.ATEST.XXXXXX.SECAB
AFSC.ATEST=Job Naming Convention

# 9. Tape or Paper Transmissions

9.1 In the event either Party does not have CONNECT:Direct capabilities on the Effective Date of this Agreement, such Party agrees to establish CONNECT:Direct transmission capabilities with the other Party within the time period mutually agreed and at the establishing Party's expense. Until such time, the Parties will transmit billing information to each other via magnetic tape or paper (as agreed to by AT&T and USWC). Connectivity billing information and data contained on magnetic tapes or paper for payment shall be sent to the Parties at the following locations. The Parties acknowledge that all tapes transmitted to the other Party via U.S. Mail or Overnight Delivery and which contain Connectivity Billing data will not be returned to the sending Party.

# TO AT&T:

Tape Transmissions via U.S. Mail:	NEED ADDRESS	
Tape Transmissions via Overnight Delivery:	AT&T NEED ADDRESS	

NEED ADDRESS
AT&T
NEED ADDRESS

# TO USWC:

Tape Transmissions:	Attn:		
Paper Transmissions:	Attn:		

- 9.2 Each Party will adhere to the tape packaging requirements set forth in this subsection. Where magnetic tape shipping containers are transported in freight compartments, adequate magnetic field protection shall be provided by keeping a typical 6-inch distance from any magnetic field generating device (except a magnetron-tape device). The Parties agree that they will only use those shipping containers that contain internal insulation to prevent damage. Each Party will clearly mark on the outside of each shipping container its name, contact and return address. Each Party further agrees that it will not ship any Connectivity Billing tapes in tape canisters.
- 9.3 All billing data transmitted via tape must be provided on a cartridge (cassette) tape and must be of high quality, conform to the Parties' record and label standards, 9-track, odd parity, 6250 BPI, group coded recording mode and extended binary-coded decimal interchange code ("EBCDIC"). Each reel of tape must be 100% tested at 20% or better "clipping" level with full width certification and permanent error free at final inspection. AT&T reserves the right to destroy a tape that has been determined to have unrecoverable errors. AT&T also reserves the right to replace a tape with one of equal or better quality.
- 9.4 Billing data tapes shall have the following record and label standards. The dataset serial number on the first header record of an IBM standard tape label also shall have the following format:

	CABS BOS	SECAB
Record Length	225 bytes (fixed length)	250 bytes (fixed length
Blocking factor	84 records per block	84 records per block
Block size	18,900 bytes per block	18,900 bytes per block
Labels	Standard IBM Operating	Standard IBM Operating
	System	System

9.5 A single 6-digit serial number must appear on the external (flat) surface of the tape for visual identification. This number shall also appear in the "dataset serial number field" of the first header record of the IBM standard tape label. This serial number shall consist of the character "V" followed by the reporting location's four digit Originating Company Code and a numeric character chosen by the sending company. The external and internal label shall be the same. The dataset name shall appear on the flat side of the reel and also in the "data set name field" on the first header record of the IBM standard tape label. USWC's name, address, and contact shall appear on the flat side of the cartridge or reel.

9.6 Tape labels shall conform to IBM OS/VS Operating System Standards contained in the IBM Standard Labels Manual (GC26-3795-3). IBM standard labels are 80-character records recorded in EBCDIC, odd parity. The first four characters identify the labels:

Volume 1	Volume label
HDR1 and HDR2	Data set header labels
EOV1 and EOV2	Data set trailer labels (end-of-volume for multi-reel files)
EOF1 and EOF2	Data set trailer labels (end-of-data-set)

The HDR1, EOV1, and EOF1 labels use the same format and the HDR2, EOV2, and EOF2 labels use the same format.

9.7 The Standard Volume Label Format (Vol. 1) is described below:

FIELD NAME	CONTENTS
Label Identifier (3 bytes)	The characters "VOL" identify this label as a volume label.
Label Number (1 byte)	The relative position of this label within a set of labels of the same type; it is always a 1 for the IBM standard volume label.
Volume Serial Number (6 bytes)	A unique identification code, normally numeric characters (000001-999999), but may be alpha-numeric; if fewer than 6 characters, must be left-justified. This same code should also appear on the external (flat) surface of the volume for visual identification.
Reserved (1 byte)	Reserved for future use - should be recorded as blanks.
VTOC Pointer (10 bytes)	Direct-access volumes only. This field is not used for tape volumes and should be recorded as blanks.
Reserved (10 bytes)	Reserved for future use - should be recorded as blanks.
Owner Name and Address Code(10 bytes)	Indicates a specific customer, person, installation, department, etc., to which the volume belongs. Any code or name is acceptable.
Reserved (29 bytes)	Reserved for future use - should be recorded as blanks

9.8 The IBM Standard Dataset Label 1 Format (HDR1, EOV1, EOF1) is

## described below:

FIELD NAME	CONTENTS
Label Identifier (3 bytes)	Three characters that identify the label are: HDR Header label (at the beginning of a dataset) EOV Trailer label (at the end of a tape volume, when the dataset continues on another volume) EOF Trailer label (at the end of a dataset).
Label Number (1 byte)	The relative position of this label within a set of labels of the same type; it is always a 1 for dataset label 1.
Dataset Identifier (17 bytes)	The rightmost 17 bytes of the dataset name (includes GnnnnVnn if the dataset is part of a generation data group). If the dataset name is less than 17 bytes, it is left-justified and the remainder of this field is padded with blanks.
Dataset Serial Number (6 bytes)	The volume serial number of the tape volume containing the dataset. For multi-volume datasets, this field contains the serial number of the first volume of the aggregate created at the same time. The serial number can be any 6 alphanumeric characters, normally numeric (000001-999999). If the number of characters is fewer than 6 characters, the code must be left-justified and followed by blanks.
Volume Sequence Number (4 bytes)	A number (0001-9999) that indicates the order of volume within the multi-volume group created at the same time. This number is always 0001 for a single volume dataset.
Dataset Sequence Number (4 bytes)	A number (0001-9999) that indicates the relative position of the dataset within a multi-dataset group. This number is always 0001 for a single dataset organization.
Generation Number (4 bytes)	If the dataset is part of a generation data group, this field contains a number from 0001 to 9999 indicating the absolute generation number (the first generation is recorded as 0001). If the dataset is not part of a generation data group, this field contains blanks.
Version Number Of Generation (2 bytes)	If the dataset is part of a generation data group, this field a numb from 00 to 99 indicating the version number of the generation (the first version is recorded as 00). If the dataset is not part of a generation data group, this field contains blanks.

Creation Date (6 bytes)	Year and day of the year when the dataset was created. The date is shown in the format byyddd where:  b = blank  yy = year(00-99)  ddd = day(001-366)
Expiration Date (6 bytes)	Year and day of the year when the dataset may be scratched or overwritten. The data is shown in the format byyddd where: b = blank yy = year (00-99) ddd = day (001-366)
Dataset Security (1 byte)	A code number indicating the security status of the dataset is as follows:  O No password protection Password protection Additional identification of the dataset is required before it can be read, written, or deleted (ignored if volume is RACF-defined) Password protection Additional identification of the dataset is required before it can be read, written, or deleted (ignored if volume is RACF-defined).
Block Count (6 bytes)	This field in the trailer label shows the number of data blocks in the dataset on the current volume. This field in the header label is always zeros (000000).
System Code (13 bytes)	Unique code that identifies the system.
Reserved (7 bytes)	Reserved for future use - should be recorded as blanks.

9.9 The IBM Standard Dataset Label 2 Format (HDR2, EOV2, EOF2) always follows dataset label 1 and contains additional information about the associated dataset as described below:

FIELD NAME	CONTENTS	
Label Identifier	Three characters that identify the label are as follows:	
(3 bytes)	HDR Header label (at the beginning of a dataset)	
	EOV Trailer label (at the end of a tape volume, when	
The second secon	the dataset continues on another volume)	
	EOF Trailer label (at the end of a dataset).	

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Label Number (1 byte)	The relative position of this label within a set of labels of the same type; it is always a 2 for dataset label 2.
Record Format (1 byte)	An alphabetic character that indicates the format of records in the associated dataset as follows:  F Fixed length  V Variable length  U Undefined length.
Block Length (5 bytes)	A number up to 32760 that indicates the block length, in bytes. Interpretation of the number depends on the following associated record format in Field 3:  Format F - Block length (must be a multiple of the logical record length in Field 5)  Format V - Maximum block length (including the 4 byte length indicator in the block)  Format U - Maximum block length.
Record Length (5 bytes)	A number that indicates the record length, in bytes. Interpretation of the number depends on the following associated record format in Field 3: Format F - Logical record length Format V - Maximum logical record length (including the 4 byte length indicator in the records) Format U - Zeros.
Tape Density (1 byte)	A code indicating the record density of the tape, as follows:  Recording Density  DEN Value 9-Track Tape  3 1600 (PE)  4 6250 (GCR)  PE - is for phase encoded mode  GCR - is for group coded recording mode.
Dataset Position (1 byte)	A code, indicating a volume switch, is as follows:  0 - No volume switch has occurred  1 - A volume switch previously occurred.
Job/Job Step (17 bytes)	Identification of the job and job step that created the dataset.  The first 8 bytes contain the name of the job, the ninth byte is a slash  (/), and the final 8 bytes contain the name of the job step.

Tape Recording Technique (2 bytes)	A code or blanks indicating the tape recording technique used. This field is recorded as blanks for 9-track tape. The only technique available for 9-track tape is odd parity and no translation.
Control Characters (1 byte)	A code indicating whether a control character set was used to create the dataset and the type of control characters used:  A Contains ASCII control characters  M Contains machine control characters  b Contains no control characters.
Reserved (1 byte)	Reserved for future use - should be recorded as blanks.
Block Attribute (1 byte)	A code indicating the block attribute used to create the dataset:  B Blocked records S Spanned records R Blocked and spanned records b No blocked and no spanned records.
Reserved (8 bytes)	Bytes 40-42 - reserved for future use -should be blanks. Bytes 43-47 - (3420 tape units only) serial number of creating tape unit. Blank for other units.
Checkpoint Dataset (1 byte)	In VS2-Release 2, this byte contains the identifier character C if the dataset is a checkpoint dataset; the byte is blank if the dataset is not a check point dataset or in other releases of the VS systems.
Reserved (32 bytes)	Reserved for future use - should be recorded as blanks.

## 10. Testing Requirements

10.1 At least thirty (30) days prior to USWC sending AT&T a mechanized Connectivity Bill for the first time via electronic transmission, or tape, or at least thirty (30) days prior to changing mechanized formats (i.e., from SECAB to CABS), USWC shall send to AT&T Connectivity Bill data in the appropriate mechanized format for testing to ensure that the bills can be processed and that the bills comply with the requirements of this Attachment. USWC shall also provide to AT&T's Company Manager, located at

, the LEC's originating or state level company code so that it may be added to AT&T's internal tables at least thirty (30) calendar days prior to testing or a change in the LEC's originating or state level company code. AT&T will notify USWC within the time period agreed to by the Parties if

Connectivity Billing transmission fails to meet AT&T's testing specifications. USWC shall make the necessary corrections within the time period agreed to with AT&T to ensure that billing transmissions meet AT&T's testing specifications. USWC shall not send AT&T a mechanized Connectivity Bill (except for testing) until such bills meet AT&T's testing specifications. If USWC meets AT&T's testing specifications, USWC may begin sending AT&T mechanized Connectivity Bills on the next Bill Date, or within ten (10) days, whichever is later.

10.2 During the testing period, USWC shall transmit to AT&T Connectivity Billing data and information via paper transmission. Test tapes shall be sent to AT&T at the following location:

Test Tapes:	AT&T
	NEED ADDRESS
the section of	

### 11. Additional Requirements

- 11.1 USWC agrees that if it transmits data to AT&T in a mechanized format, USWC will also comply with the following specifications which are not contained in CABS or SECAB guidelines but which are necessary for AT&T to process Connectivity Billing information and data:
  - The BAN shall not contain embedded spaces or low values.
  - The Bill Date shall not contain spaces or non-numeric values.
  - Each Connectivity Bill must contain at least one detail record.
  - Any "From" Date should be less than the associated "Thru" Date and neither date can contain spaces.
  - The Invoice Number must not have embedded spaces or low values.
- 11.2 For those Connectivity Charges billed in a mechanized format and in accordance with SECAB's format, USWC agrees to comply with the additional requirement set forth below:
  - All data denoted as IC preference is required.
  - When the Company Code is not a State Level Company Code, the State

Identification should be the state from which charges were incurred.

The SECAB Inventory and Rating Record Information for a Connectivity Bill

will be provided monthly.

In a multiple state or multiple Exchange Carrier (EC) environment, the STATE IDENTIFICATION on the Face Page (SCFAC1) Record should be populated with XX. This indicates the amounts on Summary Page 1-3 (SCSUM1, SCSUM2 and SCSUM3) Records represent the sum of multiple Summary Pages 4 and 5 (SCSUM4 and SCSUM5) Records.

The mechanized records should be sent in the following sequence. (All records have been denoted, however they should be sent only when the production of the record is applicable as described in the SECAB document.)

### RECORD

SCFILE

SCHEAD

SCFAC1

SCFAC2

SCFAC3

SCFAC4

SCSUM1

SCSUM2 **SCSUM3** 

SCDSS1

NOTE:

**GROUP BY COMPANY -**

SCSUM4, SCSUM5,

SCSUM5

SCSUM4

SCDSS2

SCDSS2; SCSUM4, SCSUM5, SCDSS2; etc.

SCADJ1

SCOCC1

SCUSG1

SCFCTR

SCSURG

SCTAX1

SCCKTL

SCSPC1

NOTE:

**GROUP BY CIRCUIT CHARGE -**

SCSPC2

SCSPC3

SCSPC1, SCSPC2, SCSPC3;

SCSPC1, SCSPC2, SCSPC3,

etc.

### SCEND1 SCEND2

### 12. Bill Accuracy Certification

12.1 The Parties agree that in order to ensure the proper performance and integrity of the entire Connectivity Billing process, USWC will be responsible and accountable for transmitting to AT&T an accurate and current bill. USWC agrees to implement control mechanisms and procedures to render a bill that accurately reflects the Elements, Combinations and Local Services ordered and used by AT&T. Accordingly, AT&T and USWC agree to replicate, for the purposes of this Agreement, the process and methodology for access certification set forth in the Access Billing Supplier Quality Certification Operating Agreement executed by AT&T and USWC which governs certification of access bills for interLATA and intraLATA calls.

## 13. Payment Of Charges

- 13.1 Subject to the terms of this Agreement, AT&T and USWC will pay each other within thirty (30) calendar days from the Bill Date, or twenty (20) calendar days from the receipt of the bill, whichever is later. If the payment due date is a Sunday or is a Monday that has been designated a bank holiday by the Chase Manhattan Bank of New York, payment will be made the next business day. If the payment due date is a Saturday or is on a Tuesday, Wednesday, Thursday or Friday that has been designated a bank holiday by the Chase Manhattan Bank of New York, payment will be made on the preceding business day.
- 13.2 Payments shall be made in U.S. Dollars via electronic funds transfer ("EFT") to the other Party's bank account. At least thirty (30) days prior to the first transmission of Connectivity Billing data and information for payment, USWC and AT&T shall provide each other the name and address of its bank, its account and routing number and to whom Connectivity Billing payments should be made payable. If such banking information changes, each Party shall provide the other Party at least sixty (60) days' written notice of the change and such notice shall include the new banking information. The Parties will render payment via EFT. AT&T will provide USWC with one address to which such payments shall be rendered and USWC will provide to AT&T only one address to which such payments shall be rendered. In the event AT&T receives multiple Connectivity Bills from USWC which are payable on the same date, AT&T may remit one payment for the sum of all Connectivity Bills payable to USWC's bank account specified in this subsection. Each Party shall provide the other Party with a contact person for the handling of Connectivity Billing payment questions or problems.

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### 14. Billing Disputes

- dispute. In the event of a billing dispute, the Parties will endeavor to resolve the dispute within sixty (60) calendar days of the Bill Date on which such disputed charges appear. Resolution of the dispute is expected to occur at the first level of management resulting in a recommendation for settlement of the dispute and closure of a specific billing period. The Parties shall comply with all federal, state and local guidelines for settling billing disputes. Closure of a specific billing period will occur by joint agreement of the Parties whereby the Parties agree that such billing period is closed to any further analysis and financial transactions, except those resulting from an Audit as described in Section 4 of the General Section of this Agreement. Closure will take place within three (3) months of the Bill Date. The month being closed represents those Connectivity Charges that were billed or should have been billed by the respective Bill Date. If the issues are not resolved within the allotted time frame, the following resolution procedure will begin:
- 14.1.1 If the dispute is not resolved within sixty (60) days of the Bill Date, the dispute will be escalated to the second level of management for each of the respective Parties for resolution.
- 14.1.2 If the dispute is not resolved within ninety (90) days of the Bill Date, the dispute will be escalated to the third level of management for each of the respective Parties for resolution.
- 14.1.3 If the dispute is not resolved within one hundred twenty (120) days of the Bill Date, the dispute will be escalated to the fourth level of management for each of the respective Parties for resolution.
- 14.1.4 If the dispute is not resolved within one hundred fifty (150) days of the Bill Date, the dispute will be resolved in accordance with the Dispute Resolution procedures set forth in the Section 11 of the General Section of this Agreement.
- 14.1.5 If a Party disputes a Connectivity Charge and does not pay such charge by the payment due date, such charges shall be subject to late payment charges as set forth in the Late Payment Charges provision of this Attachment. If a Party disputes Connectivity Charges and the dispute is resolved in favor of such Party, the other Party shall credit the Connectivity Bill of the disputing Party for the amount of the disputed charges along with any late payment charges assessed no later than the second Bill Date after the resolution of the dispute. Accordingly, if a Party disputes Connectivity Charges and the dispute is resolved in favor of the other Party, the disputing Party shall pay the other Party the amount of the disputed charges and any associated late payment charges

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assessed no later than the second bill payment due date after the resolution of the dispute. In no event, however, shall any late payment charges be assessed on any previously assessed late payment charges.

### 15. Late Payment Charges

15.1 If either Party fails to remit payment for any Connectivity Charges described in this Attachment by the payment due date, or if a payment or any portion of a payment is received by either Party after the payment due date, or if a payment or any portion of a payment is received in funds which are not immediately available to the other Party, then a late payment penalty shall be assessed. The late payment charge shall be calculated based on the portion of the payment not received by the payment date times the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the payment date to and including the date that payment is actually made. In no event, however, shall interest be assessed on any previously assessed late payment charges.

### 16. Adjustments

16.1 Subject to the terms of this Attachment, USWC will reimburse AT&T for incorrect Connectivity Billing charges; overcharges; Local Services Network Elements or Combinations, ordered or requested but not delivered; interrupted Local Services associated with any Network Element or Combinations ordered or requested; Local Services, Network Elements or Combinations, of poor quality; and installation problems if caused by USWC. Such reimbursements shall be set forth in the appropriate section of the Connectivity Bill pursuant to CABS, or SECAB standards.

### 17. Recording Of Call Information

17.1 The Parties agree to record call information in accordance with this subsection. To the extent technically feasible, each Party will record all call detail information associated with every call originated or terminated to the other Party's local exchange customer. The Parties agree that they will record call detail information if technically feasible even if such certain records or call detail information has not been recorded in the past. These records shall be provided at a Party's request and shall be formatted pursuant to Bellcore standards and the terms and conditions of this Agreement. These records shall be transmitted to the other Party daily in EMR format via CONNECT:Direct; provided, however, that if AT&T and USWC do not have Connect:Direct

capabilities, such records shall be transmitted as the Parties agree. USWC and AT&T agree that they will retain, at each Party's sole expense, copies of all AMA records transmitted to the other Party for at least seven (7) calendar days after such transmission.

- 17.2 Each Party will provide the other Party with a carrier identification code ("CIC") on each EMR record transmitted to the other Party. If USWC does not have a CIC for any local exchange carrier, ALEC or IXC for whom USWC must supply to AT&T Connectivity Billing records or information pursuant to this Attachment, USWC agrees that it will assist the local exchange carrier, ALEC or IXC in obtaining a CIC expeditiously. Until the local exchange carrier, ALEC or IXC has received a CIC, USWC agrees that it will submit its CIC to AT&T on those records for billing and payment. USWC further agrees that it will then be responsible for obtaining reimbursement for the respective charges from the appropriate carrier. Likewise, if AT&T does not have a CIC for any local exchange carrier, ALEC or IXC for whom AT&T must supply to LEC Connectivity Billing records or information pursuant to this Attachment, AT&T agrees that it will assist the local exchange carrier, ALEC or IXC in obtaining a CIC expeditiously. Until the local exchange carrier, ALEC or IXC has received a CIC, AT&T agrees that it will submit its CIC to LEC on those records for billing and payment. AT&T further agrees that it will then be responsible for obtaining reimbursement for the respective charges from the appropriate carrier.
- 17.3 The Parties agree that it will meet the following performance measurements for the provision of EMR records:
- 17.3.1 Timeliness: Of the total number of records recorded each day, ninety-nine percent (99%) of all such records should be received within five (5) calendar days of their recording. Of the total number of records recorded each day, one hundred percent (100%) of all such records should be received within ten (10) calendar days of their recording.
- 17.3.2 Accuracy: There should be no more than sixty (60) errors per one (1) million records transmitted.
- 17.3.3. Completeness: There should be no more than twenty (20) omissions per one (1) million records.
- 17.4 The Parties agree that they will provide each other a single person to contact regarding any data exchange problems.

### 18. Examination Of Records

18.1 Without waiver of and in addition to the Audit rights set forth in Section 4 of

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the General Section of this Agreement, upon reasonable notice and at reasonable times and in accordance with the Access Billing Supplier Quality Certification Operating Agreement, AT&T or its authorized representatives may examine USWC's documents, systems, records and procedures which relate to the billing and recording of the Connectivity Charges to AT&T under this Attachment 7.

### Attachment 8

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**SECTION VII: APPENDICES** 

### PROVISION OF CUSTOMER USAGE DATA

### 1. Introduction

1.1 This Attachment sets forth the terms and conditions for USWC's provision of recorded usage data (as defined in this Attachment) to AT&T. Recorded Usage Data shall be provided by USWC to AT&T when AT&T purchases Network Elements, Combinations or Local Services from USWC.

## 2. General Requirements for Recorded Usage Data

- 2.1 USWC shall provide AT&T with Recorded Usage Data in accordance with this Attachment.
- 2.2 USWC's provision of Recorded Usage Data to AT&T shall be in accordance with AT&T's Direct Measures of Quality (DMOQs) set forth in Appendix I of this Attachment.
- 2.3 USWC shall retain Recorded Usage Data in accordance with applicable law and regulation.

### 3. Usage Data Specifications

- 3.1 USWC will record all billing usage originating from AT&T Customers using the USWC-provided Element or Local Services. Recorded Usage Data includes, but is not limited to, the following categories of information:
  - Call Attempts
  - Completed Calls
  - Use of CLASS/LASS/Custom Features
  - Calls to Information Providers Reached Via USWC Facilities and Contracted by USWC
  - Calls to Directory Assistance Where USWC Provides Such Service to an AT&T Customer
  - Calls Completed Via USWC-Provided Operator Services Where USWC Provides Such Service to AT&T's Local Service Customer
  - For USWC-Provided CENTREX Service, Station Level Detail
  - Complete Call Detail and Complete Timing Information

 Completed Calls Which USWC Does Not Record for Its Own Service Offerings (e.g., Flat Rate Free Calling Area Service)

USWC shall provide to AT&T Recorded Usage Data for AT&T Customers only. USWC will not submit other carrier local usage data as part of the AT&T Recorded Usage Data.

3.3 End user customer usage records and station level detail records shall be in packs in accordance with EMR standards.

### 4. Recorded Usage Data Format

- 4.1 USWC will provide Recorded Usage Data in the EMR format and by category, group and record type, as specified in the AT&T Customer Usage Data Transfer Requirements, March 1996 ("Data Requirements"), which is attached hereto and incorporated herein as Appendix II.
- 4.2 USWC shall include the Working Telephone Number (WTN) of the call originator on each EMR call record.
- 4.3 End user customer usage records and station level detail records shall be in packs in accordance with EMR standards.

### 5. Recorded Usage Data Reporting Requirements

- 5.1 USWC shall segregate and organize the Recorded Usage Data in accordance with EMR standards. To the extent AT&T wants an organization different from EMR standards, it can request such organization from USWC and pay the associated costs (assuming the organization differs from that which USWC provides to itself.
- 5.2 USWC shall provide segregated Recorded Usage Data to multiple AT&T biller locations as designated by AT&T.
- 5.3 USWC, at no cost to AT&T, shall transmit Data Requirements formatted Recorded Usage Data to AT&T via CONNECT:Direct as designated by AT&T.
- 5.4 AT&T will test and certify the CONNECT:Direct interface to ensure the accurate receipt of Recorded Usage Data. USWC shall make any changes necessary to pass the AT&T CONNECT:Direct certification process.

- 5.5 USWC shall provide Recorded Usage Data to AT&T, on a schedule to be determined by the Parties.
- 5.6 USWC will establish a single point of contact to respond to AT&T call usage, data error, and record transmission inquiries.
- 5.7 The Recorded Usage Data EMR format, content, and transmission process will be tested as specified by AT&T.
- 5.8 When requested by AT&T for security purposes, USWC shall provide AT&T with Recorded Usage Data within the same time frames it provides such data to itself or within four (4) hours of the call completion, whichever is earlier. If not available in EMR format, the Recorded Usage Data may be provided in AMA format.

### 6. Recording Failures

- 6.1 Loss of Recorded Usage Data AT&T Recorded Usage Data determined to have been lost, damaged or destroyed as a result of an error or omission by USWC in its performance of the recording function shall, upon AT&T's request, be recovered by USWC at no charge to AT&T. In the event the data cannot be recovered by USWC, USWC shall estimate the messages and associated revenue, with assistance from AT&T, based upon the method described below. This method will be applied on a consistent basis, subject to modifications agreed to by USWC and AT&T. This estimate will be used to adjust amounts AT&T owes USWC for services USWC provides in conjunction with the provision of Recorded Usage Data.
- 6.1.1 Partial Loss USWC shall review its daily controls to determine if data has been lost. When there has been a partial loss, actual message and minute volumes shall be reported, if possible. Where actual data are not available, a full day shall be estimated for the recording entity, as outlined in Section 6.1.3 following. The amount of the partial loss shall then determined by subtracting the data actually recorded for such day from the estimated total for such day.
- 6.1.2 Complete Loss Estimated message and minute volumes for each loss consisting of an entire AMA tape or entire data volume due to its loss prior to or during processing, loss after receipt, degaussed before processing, receipt of a blank or unreadable tape, or loss for other causes, shall be reported.
- 6.1.3 Estimated Volumes From message and minute volume reports for the entity experiencing the loss, USWC shall secure message/minute counts for the four (4) corresponding days of the weeks preceding that in which the loss occurred and

compute an average of these volumes. USWC shall apply the appropriate average revenue per message ("ARPM") provided by AT&T to the estimated message volume to arrive at the estimated lost revenue.

## **Exceptions:**

- 6.1.3.1 If the day of loss is not a holiday but one (1) (or more) of the preceding corresponding days is a holiday, USWC shall use additional preceding weeks in order to procure volumes for two (2) non-holidays in the previous two (2) weeks that correspond to the day of the week that is the day of the loss.
- 6.1.3.2 If the loss occurs on a weekday that is a holiday (except Christmas), USWC shall use volumes from the two (2) preceding Sundays.
- 6.1.3.3 If the loss occurs on Mother's Day or Christmas, USWC shall use volumes from that day in the preceding year (if available).
- 6.2 AT&T may also request data be provided that has previously been successfully provided by USWC to AT&T. USWC shall provide such data, if available, at no additional charge to AT&T.

### 7. Charges

7.1 USWC shall bill and AT&T shall pay the charges set forth in Attachment 8, Appendix 2, Section 4 for Recorded Usage Data. Billing and payment shall be in accordance with the applicable terms and conditions set forth in this Agreement.

### 8. Local Account Maintenance

- 8.1 When AT&T purchases Local Service from USWC, and, as appropriate, when AT&T purchases certain Unbundled Network Elements, USWC shall provide AT&T with Local Account Maintenance as described herein. These procedures are in addition to Service Order procedures set forth in Part I and Attachment 5 to this Agreement.
- 8.2 When notified by AT&T that an AT&T customer has switched to AT&T service, USWC shall provision the change, and notify AT&T via CONNECT:Direct within twenty-four (24) hours of the provisioning that the customer has changed to another service provider ("OUTPLOC").
  - 8.3 When notified by AT&T that a customer has changed his/her PIC only from

one interexchange carrier to another carrier, USWC shall provision the PIC only change.

8.4 If notified by an interexchange carrier using an '01' PIC order record that an AT&T Customer has changed his/her PIC only, USWC will reject the order and notify that interexchange carrier using an industry standard '3148' record with the Operating Company Number of the serving AT&T indicated, that an '01' CARE PIC record should be sent to AT&T for processing.

### 9. Clearinghouse Procedures

- 9.1 The Parties acknowledge that calls will be placed using the service of one Party that will be billable to customers of another Party. In order to ensure that these calls are properly accounted for and billed to the appropriate customer, the Parties agree to work together and, when required, with other carriers, to establish clearinghouse procedures to accomplish these objectives. It is the intention of the parties that these negotiations will be completed within six (6) months of the Effective Date of this Agreement. These procedures will establish the following:
- 9.1.1 AT&T shall have access to the Bellcore CMDS process for transmitting, receiving and settling calling card, in-collect, and out-collect inter-region messages.
- 9.1.2 AT&T shall have access to the Bellcore company regional process for receiving and settling calling card, in-collect, and out-collect intra-region messages.
- 9.1.3 In the event a clearinghouse procedure is not in place upon the Effective Date of this Agreement, USWC will implement an interim arrangement with AT&T.

## APPENDIX I TO **ATTACHMENT 8**

### DMOQ'S FOR PROVISION OF CUSTOMER USAGE DATA

#### **Switched Services** 1.

USWC will provide all Recorded Usage Information detail in an accurate timely manner. The format and content is described in the current Bellcore EXCHANGE MESSAGE RECORD (EMR) document.

#### File Transfer 2.

USWC will initiate and transmit all files error free and without loss of signal.

Metric:

Number of FILES Received - X 100

Number of FILES Sent

Notes: All measurement will be a on a rolling period.

Measurement:

Rating

Criteria

**Exceeds Expectations** 

6+ months of file transfers without a

failure.

**Meets Expectations** 

6 months of file transfers without a failure.

Does Not Meet Expectations < 6 months of file transfers without error.

<sup>\*\*</sup> During the first six (6) months, no rating will be applied.

### 3. Timeliness

Intentionally deleted.

## 4. Completeness

Intentionally deleted.

# 5. Accuracy

Intentionally deleted.

## 6. Data Packs

Intentionally deleted.

# 7. Recorded Usage Data Accuracy

Intentionally deleted.

## 8. Usage Inquiry Responsiveness

Intentionally deleted.

# 9. Dedicated Services

Since dedicated services have no unique billing requirements for local service at this time, this is reserved for future use.

## Attachment 8

## APPENDIX II TO ATTACHMENT 8

CUSTOMER USAGE DATA
TRANSFER REQUIREMENTS
July 1996

# SECTION I: SCOPE

### General

This Appendix addresses the transmission by USWC of AT&T customer usage to AT&T.

### 1.1 Usage Summary

Messages will be transmitted, via a direct feed, to AT&T in standard EMR format.

The following is a list of EMR records AT&T can expect to receive from USWC:

Header Record 20-21-01 Trailer Record 20-21-02

Detail Records\* 01-01-01, 06, 07, 08, 09, 16, 18, 31, 32, 33, 35, 37,80, 81, 82,

83

10-01-01, 06, 07, 08, 09, 16, 18, 31, 32, 35, 37, 80, 81, 82, 83

Credit Records 03-01-XX
Rated Credits 41-01-XX
Cancel Records 51-01-XX
Correction Records 71-01-XX

\*Category 01 is utilized for Rated Messages; Category 10 is utilized for Unrated Messages

In addition, USWC shall provide a 10-01-18 Miscellaneous Charge record to support the Special Features Star Services (see Subappendix F for specific details) if these features are part of USWC's offering.

For detailed information regarding EMR, refer to the current version of the Bellcore Practice BR010-200-010 Appendix.

### 2. Appendix Content

This Appendix describes baseline requirements for the transfer of USWC recorded, unrated usage to AT&T. Testing requirements and the reports needed to ensure data integrity are also included. Additional requirements and implementation details may be identified for conditions unique to USWC. Modifications and/or exceptions to this Appendix must be negotiated and mutually agreed upon by USWC and AT&T.

# Attachment 8

# SECTION II: RECORDED USAGE TO BE TRANSMITTED TO AT&T

### 1. General

This section addresses the types of usage to be transmitted by USWC to AT&T.

## 1.1 Usage To Be Transferred To AT&T

## 1.1.1 AT&T Usage To Be Transferred

The following messages recorded by USWC are to be transmitted to AT&T. USWC recorded usage includes all billable usage by AT&T Customers.

NOTE: Rated incollect messages should be transmitted via the direct feed and can be intermingled with the unrated messages. No special packing is needed.

At the discretion of AT&T, any of the above mentioned messages that cannot be rated and/or billed by AT&T may be returned to USWC via a direct returns feed. Returned messages will be sent to USWC in EMR format. Standard EMR return codes will be utilized.

File transfer specifications are set forth in Section 3 of this Attachment 8.

### 1.2 AT&T Usage

The Recorded Usage Data in a local resale environment includes all billable local usage. USWC will provide AT&T with unrated EMR records associated with all intraLATA toll and local usage which they record on AT&T's behalf. Any Category, Group and/or Record types approved in the future for USWC will be included if they fall within the definition of local service resale. AT&T shall be given notification of implementation of a new type within the negotiated time frames.

NOTE: USWC messages will be packed using the packing criteria outlined in Section 3.4.8. It is important to note that all USWC messages will be packed together (intermingled) based on the appropriate AT&T Send To/Bill To RAO combination. Specific categories, groups, and record types will not be packed separately.

SECTION III: USWC TO AT&T USAGE FEED

### 1. General

This section contains the information required for USWC to transmit the usage defined in Section II to AT&T. This section specifically addresses the dataset requirements and processing.

### 1.1 Detailed EMR Record Edits

AT&T will perform detailed record edits on the unrated and rated messages upon receipt from USWC. Messages that fail these edits may be returned to USWC.

### 1.2 Duplicate Record Checks

AT&T will perform record checks on the unrated and rated messages to validate that duplicate messages are not sent by USWC to AT&T.

### 1.3 USWC to AT&T Usage Feed

## 1.3.1 Usage Data Transport Requirements

USWC will provide the transport facility between USWC location and the AT&T location. It is AT&Ts intent that usage data be transmitted via CONNECT:Direct whenever possible. In the event usage transfer cannot be accommodated by CONNECT:Direct because of extended (one (1) business day or longer) facility outages, or if facilities do not exist, USWC will contract for a courier service to transport the data via tape.

USWC will provide AT&T with contacts, Remote Identifiers (IDs), and expected usage data volumes for each sending location.

AT&T will provide contacts responsible for:

Receiving usage transmitted by USWC.

Receiving usage tapes from a courier service in the event of a facility outage.

## 1.3.2 Physical Characteristics

Data transported to AT&T on tape or cartridge via a courier will have the physical characteristics indicated in Subappendix A. AT&T's intent is for variable block format (2,476 bytes) with a LRECL of 2472.

### 1.3.3 Data Delivery Schedules

Data will be delivered to AT&T by USWC daily (Monday through Friday) unless otherwise negotiated. AT&T and/or USWC Data Center holidays are excluded. USWC and AT&T will exchange schedules of designated Data Center holidays.

### 1.3.4 Resending Data

AT&T will notify USWC of resend requirements if a pack or entire dataset must be replaced due to pack rejection, damage in transit, dataset name failure, etc.

### 1.3.5 Pack Rejection

Critical edit failure on the Pack Header or Pack Trailer records will result in pack rejection (e.g., detail record count not equal to grand total included in the pack trailer). Notification of pack rejection will be made by AT&T within one (1) business day of processing. Rejected packs will be corrected by USWC and retransmitted to AT&T by USWC.

### 1.3.6 Held Packs And Messages

AT&T and USWC will track pack number to control input based upon invoice sequencing criteria. USWC will be notified of sequence failures identified by AT&T and resend procedures are to be invoked.

### 1.3.7 Data Content Requirements

EMR is the format to be used for usage data provided to AT&T.

NOTE: Prior to July 1, 1996, the usage data sent will be compacted, using standard compaction procedures described in Subappendix B hereto. Effective July 1, 1996, compaction will be eliminated.

### 1.3.8 RAO Packing Requirements

A pack shall contain a minimum of one message record or a maximum of 9,999 message records plus a pack header record and a pack trailer record. A file transmission contains a maximum of 99 packs. A dataset shall contain a minimum of one pack. USWC will provide AT&T one dataset per sending location, with the agreed upon RAO/OCN populated in the Header and Trailer records.

Within the Header and Trailer records, the FROM RAO identifies the location that will be sending usage to AT&T. USWC will populate the FROM RAO field with the unique

numeric value identifying the location that is sending the data to AT&T. USWC will populate the Send To/Bill To RAO fields with the appropriate AT&T RAO values. Also, Pack Header and Trailer will have the OCN appropriately populated.

The FROM RAO, OCN, and Remote Identifiers will be used by AT&T to control invoice sequencing and each will have its own invoice controls. The FROM RAO will also be used to determine where the message returns file, containing any misdirected and unguidable usage, will be sent.

The file's Record Format (RECFM) will be Variable Block (VB) Size 2,476 and the Logical Record Length (LRECL) will be 2,472 bytes. Compaction requirements can be found in Subappendix B hereto.

AT&T has no special sort requirements for the packs sent by USWC.

## 1.3.9 Dataset Naming Convention

USWC will transmit the usage to AT&T using the following dataset naming conventions.

The dataset name (DSN) will be partitioned into five nodes, separated by periods as follows:

NODE 1BB03PXNN\*

**NODE 2.IBMUP** 

NODE 3 (To be determined during negotiations)

NODE 4.USAGE

NODE 5.GNNNNV00\* (Generational Dataset to be incremented by sender). \*The italicized "N" represents numeric fields determined during negotiations.

### 1.3.10 Control Reports

AT&T accepts input data provided by USWC in EMR format in accordance with the requirements and specifications detailed in this section of the attachment. In order to ensure the overall integrity of the usage being transmitted from USWC to AT&T, data transfer control reports will be required. These reports shall be provided by AT&T to USWC on a daily or otherwise negotiated basis and reflect the results of the processing for each pack transmitted by USWC.

## 1.3.11 Message Validation Reports

AT&T will provide the following three (3) daily (or otherwise negotiated) Message Validation reports to the designated USWC System Control Coordinator. These reports will be provided for all data received within USWC Local Resale Feed and will be transmitted Monday through Friday whether or not there have been any files transmitted.

### 1.3.11.1 Message Validation Pack Reject Report (A7287)

This report provides information on packs rejected by AT&T. It lists the header and trailer record of each rejected pack and indicates the error codes and the associated error message which explains why the pack was rejected.

An example of the report and a list of Valid Error Codes and associated error messages are provided in Subappendix C hereto.

### 1.3.11.2 Message Validation Pack Accepted Report (A7288)

This report provides vital statistics and control totals by Record ID, Type of Service, Message Counts and Record Counts, for all valid, rejected and dropped messages. The information is provided in the following report formats and control levels:

- 1. USWC Total Messages
- 2. USWC Total Records
- 3. RAO Total Messages
- 4. RAO Total Records
- 5. Pack Total (Record Counts and Message Counts)

The first four report formats include percentages that indicate the relationship of the daily input volume by Record ID and Type of Record to the total input volume provided by an RAO and USWC.

An example of the report is provided in Subappendix D hereto.

### 1.3.11.3 Message Validation Detail Error Report (A7289)

An EMR detailed error report is generated for each pack/ invoice that is received and processed by AT&T. The report lists, in vertical format, the complete 175 byte EMR record that has failed to pass the initial edit criteria. It prints this detailed information only for the first five EMR records that share a common error condition. The error condition is flagged on the report by one of two possible error codes preceding the field value. The error codes are:

- (C) DENOTES CRITICAL ERRORS
- (I) DENOTES INFORMATION ERRORS

The last two pages of the report for a given pack/invoice provide the following control totals:

Total Errors for each Field

**Total Records Received** 

**Total Records Dropped** 

Total Records Rejected to MIU

Pack Reject Rate

Total Default Count (represents the number of Files on all of the input records that had to be programmatically altered to meet the EMR standards and specifications.)

If the entire pack/invoice has been rejected because of a Critical Error Rate greater than 0.5%, the last page of the report will display such a statement enclosed in asterisks.

An example of the report is provided in Subappendix E hereto.

### 1.3.11.4 Control Reports - Distribution

Since USWC is not receiving control reports, dataset names will be established during detailed negotiations.

### SECTION IV: AT&T PROCESSING REQUIREMENTS

### 1. General

This section contains requirements for AT&T processing of Recorded Usage Data that has been transmitted to AT&T for billing.

### 1.1 AT&T Rating Process

### 1.1.1 Message Rating

AT&T will rate any individual messages (as defined in Section II), that have not already been rated by USWC prior to transmitting the usage to a billing environment within AT&T.

### 1.1.2 Application Of Taxes/Fees/Surcharges

AT&T will apply taxes, fees and surcharges as appropriate for the individual messages and/or customer accounts. The application of all taxes, fees and surcharges will be applied on all local usage received from USWC.

### 1.1.3 Duplicate Messages

AT&T has existing duplicate checks as part of their message processing or billing functions. AT&T will perform these checks on the rated/unrated messages sent pursuant to USWC duplicate message disposition procedures and reports will be identified by AT&T during negotiations.

### 1.1.4 Record Edits

### 1.1.4.1 AT&T Record Edits

AT&T will perform detailed record edits on the rated and unrated messages prior to transmitting them to the billing environment. Rated and unrated records that do not pass AT&T edits will be returned to USWC.

### 1.1.4.2 USWC Record Edits

If USWC has existing detailed record edits for rated and unrated messages, USWC is to perform these edits.

Rated and unrated records that do not pass AT&T edits will be returned to USWC.

USWC will attempt to perform error correction on all records requiring such action as agreed upon through the detailed negotiations process.

### 1.1.5 AT&T To USWC Message Returns

At the discretion of AT&T, messages that have been sent to AT&T by USWC that cannot be guided to an AT&T billed account or error in processing will be returned to USWC with the appropriate negotiated return codes.

### 1.1.6 Cancel/Correction Records

AT&T, upon receipt of cancel/correction records, will perform their current matching functionality to identify the original message to be canceled/corrected. (Processing will be dependent upon individual negotiations.)

### SECTION V: TEST PLANS AND ACTIVITIES

### 1. General

This section defines USWC and AT&T activities which are required prior to implementation. The tests and activities described are necessary to ensure a smooth, accurate and well-programmed conversion. Specific test dates will be identified through the negotiations process.

### 1.1 Interface Testing

The purpose of this test is to ensure that the usage described in Section II preceding can be sent by USWC to AT&T and can be accepted and processed by AT&T. USWC will provide a test file to AT&T's designated Regional Processing Center (RPC) in the format that will be used for live day-to-day processing. The file will contain one (1) full day's production usage. The format of the file will conform to the requirements shown in Section III. AT&T will review the file and verify that it conforms to its data center requirements. AT&T will notify USWC in writing whether the format is acceptable. AT&T will also provide USWC with the agreed-upon control reports as part of this test.

### 1.2 Operational Test

The purpose of this test is to ensure that volumes of usage in consecutive sequence can be extracted, distributed, and processed by USWC and AT&T.

USWC is required to provide AT&T with USWC recorded, unrated usage (as defined in Section 2) for a minimum of five (5) consecutive days. AT&T will provide USWC with the message validation reports associated with test usage.

AT&T will rate and process the unrated local usage. AT&T will process this data to test bills. AT&T may request that the test usage contain specific usage volumes and characteristics to ensure a complete test. Specific usage volumes and characteristics will be discussed during detailed negotiations.

### 1.3 Test File

Test data should be transported via CONNECT:Direct whenever possible. In the event that courier service must be used to transport test media, the physical tape characteristics to be used are described in Subappendix A hereto.

### SECTION VI: POST DEPLOYMENT ACTIVITIES

### 1. General

Requirements for ongoing maintenance of the usage feeds between AT&T and USWC are described in this section. Included are minimal requirements for day to day control of the regularly scheduled transfer of USWC unrated and rated usage data and procedures for introducing and verifying AT&T/USWC System Changes.

### 1.1 Control Maintenance And Review

### 1.1.1 Periodic Review

Control procedures for all usage transferred between USWC and AT&T will-require periodic review. This review may be included as part of an annual audit of USWC by AT&T or as part of the normal production interface management function. Breakdowns which impact the flow of usage between USWC and AT&T must be identified and jointly resolved as they occur. The resolution may include changes to control procedures, as similar problems would be avoided in the future. Any changes to control procedures would need to be mutually agreed upon by AT&T and USWC.

### 1.1.2 Retention of Records

USWC shall maintain a machine readable back-up copy of the message detail provided to AT&T for a minimum of forty-five (45) calendar days. AT&T will maintain the message detail received from USWC for a minimum period of forty-five (45) calendar days. Designated AT&T personnel will provide these records to USWC or its authorized agents upon written request. USWC will also provide any data back to AT&T upon their written request.

### 1.2 USWC Software Changes

When USWC plans to introduce any software changes which impact the format or content structure of the usage data feed to AT&T, designated USWC personnel will notify AT&T no less than one hundred twenty (120) calendar days before such changes are implemented.

USWC will communicate the projected changes to the appropriate groups in AT&T so that potential impacts on AT&T processing can be determined.

AT&T personnel will review the impact of the change on the entire control structure as described in Section 1.5, Post Conversion Test Plan, herein. AT&T will negotiate any perceived problems with USWC and will arrange to have the data tested utilizing the modified software.

If it is necessary for USWC to request changes in the schedule, content or format of usage data transmitted to AT&T, USWC will notify AT&T.

### 1.3 AT&T Requested Changes

If it is necessary for AT&T to request changes in the schedule, content, or format of the usage data transmitted from USWC, AT&T will notify USWC.

When the negotiated changes are to be implemented, AT&T and/or USWC will arrange for testing of the modified data as described in Section 1.5, Post Conversion Test Plan.

### 1.4 AT&T Software Changes

When AT&T plans to introduce any software changes which may impact the format or content structure of the usage data transmitted from USWC, AT&T will notify the designated USWC personnel, no less than one hundred twenty (120) calendar days before such changes are implemented.

The AT&T contact will communicate the projected changes to the appropriate groups in USWC so that potential impacts on USWC processing can be determined.

AT&T will negotiate any perceived problems with USWC and will arrange to have the data tested utilizing the modified software.

Altering the one hundred twenty (120) day window for introducing software changes can be negotiated by both companies, dependent upon the scope and impact of the change.

### 1.5 Post-Conversion Test Plan

The test plan described below is designed to encompass all types of changes to the usage data transferred by USWC to AT&T and the methods of transmission for that data.

### 1.5.1 USWC System Change Description

For a USWC system change, USWC shall provide AT&T with an overall description of the change, stating the objective and a brief explanation of the reasons for the change.

During the initial negotiations regarding the change, USWC shall provide a list of the specific records and/or systems impacted by the change to designated AT&T personnel.

Finally, USWC shall also provide AT&T a detailed description of the changes to be implemented. It shall include sufficient detail for designated AT&T personnel to analyze and estimate the effects of the changes and to design tests to verify the accuracy of the implementation.

### 1.5.2 Change Negotiations

AT&T shall be notified in writing of all proposed negotiations initiated by USWC. In turn, AT&T will notify USWC of proposed change negotiations initiated by AT&T.

After formal notification of planned changes, whether originated by USWC or AT&T, designated AT&T personnel will schedule negotiation meetings as required with designated USWC personnel. The first meeting should produce the overall change description (if not previously furnished) and the list of records and/or systems affected.

In subsequent meetings, USWC shall provide the detailed description of changes to be implemented. After reviewing the described changes, designated AT&T personnel will negotiate a detailed test procedure with USWC.

### 1.5.3 Control Change Analysis

Based on the detailed description of the changes provided by USWC, and the review of the projected changes by AT&T, designated AT&T personnel will:

- 1.5.3.1 Determine the impact of the changes on the overall structure.
- 1.5.3.2 Determine whether any single change has a potential control impact (i.e., high error rate on individual records that might result in pack rejection).
- 1.5.3.3 Determine whether any controls might be adversely affected.
- 1.5.3.4 Arrange for appropriate control structure changes to meet any of the above

### conditions.

### 1.5.4 Verification Of Changes

Based on the detailed description of changes furnished by USWC, designated AT&T personnel will:

1.5.4.1 Determine the type of change(s) to be implemented.
1.5.4.2 Develop a comprehensive test plan.
1.5.4.3 Negotiate scheduling and transfer of modified data with USWC.
1.5.4.4 Negotiate testing of modified data with the appropriate AT&T rpc.
1.5.4.5 Negotiate processing of verified data through the AT&T billing system with the rpc.
1.5.4.6 Arrange for review and verification of testing with appropriate AT&T groups.

Arrange for review of modified controls, if applicable.

### 1.5.5 Introduction of Changes

1.5.4.7

When all the testing requirements have been met and the results reviewed and accepted, designated AT&T personnel wiil:

- 1.5.5.1 Negotiate an implementation schedule.
- 1.5.5.2 Verify the existence of a contingency plan with the appropriate AT&T personnel.
- 1.5.5.3 Arrange for the follow-up review of changes with appropriate AT&T personnel.
- 1.5.5.4 Arrange for appropriate changes in control program, if applicable.
- 1.5.5.5 Arrange for long-term functional review of impact of changes on the AT&T billing system, i.e., accuracy, timeliness, and completeness.

### SECTION VII: APPENDICES

### SUMMARY OF APPENDICES

### Subappendix A

Physical Characteristics Of Data Tapes/ Cartridges

### Subappendix B

Compaction Requirements

### Subappendix C

Message Validation Pack Reject Report (A7287)

### Subappendix D

Message Validation Pack Accepted Report (A7288)

### Subappendix E

Message Validation EMR Detail Error Report (A7289)

### Subappendix F

**Special Features Star Services** 

### SUBAPPENDIX A

### PHYSICAL CHARACTERISTICS OF DATA TAPES/CARTRIDGES

Data transported to AT&T by USWC, or to USWC by AT&T, on tape or cartridge via a courier will have the following physical characteristics:

Tape:

9-track, 6250 (or 1600) BPI (Bytes per inch)

Cartridge:

38,000 BPI (Bytes per inch)

LRECL:

2,472 Bytes

Parity:

Odd

Character Set:

Extended Binary Coded Decimal Interchange

Code (EBCDIC)

External labels:

Exchange Carrier Name, Dataset Name (DSN)

and volume serial number

Internal labels

IBM Industry OS labels will be used. They

consist of a single volume label and two sets of

header and trailer labels.

One file per sending location with variable

length records

104 bytes EMR compacted format plus modules

as applicable.

### SUBAPPENDIX B

### **COMPACTION REQUIREMENTS**

### COMPACTION FORMAT: Pack Header and Trailer Records

EMR Positions 1-4 5-11 12-18 19-25 26-32 33-39 40-46 47-53 54-60 61-68 69-77 78-86 87-95 96-104 105-113 114-122 123-127 128-141	1-2 3-6 7-10 11-14 15-21 22-28 29-35 36-42 43-49 50-57 58-61 62-65 66-69 70-73 74-77 78-81 82-85 86-104	Bytes 2 4 4 7 7 7 7 7 8 4 4 4 4 4 4 4 4 19	Usage* BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	Description Category & Group Filler
				Filler

### COMPACTION FORMAT: Message Detail Records

	Compacted			Description
<b>EMR Positions</b>	<b>Positions</b>	<b>Bytes</b>	Usage*	Category & Group
1-4	1-2	2	В	Filler
5-13	3-6	4	В	Filler .
14-22	7-10	4	В	Filler
23-31	11-14	4	В	Filler
32-40	14-18	4	В	Filler
41-49	19-22	4	В	Filler
50-58	23-26	4	В	Filler
59-67	27-30	4	В	Filler
68-76	31-39	9	AN	Filler
77-85	40-43	4	В	Filler
86-94	44-47	4	В	Filler
95-103	48-51	4	В	Filler
104-112	52-55	4	B	Filler
113-149	56-92	37	AN	Filler
150-158	93-96	4	В	Filler
159-167	97-100	4	В	Filler
168-175	101-104	4	В	i mci

Usage: B = Binary AN = Alphanumeric Modules will not be compacted.
 Compaction will be eliminated effective 7/1/96. AN = Alphanumeric

## **SUBAPPENDIX C**

# MESSAGE VALIDATION PACK REJECT REPORT (A7287)MM/DD/YY HH:MM:SS

RETEN CODE: 01R-00300

COMPAN	COMPANY XXXXXXX	000000000000000000000000000000000000000	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	000000000000000000000000000000000000000		> > > > > > > > > > > > > > > > > > > >	
HEADER R	RECORD ID 999999	DATE CREATED 99-99-99	INVOICE NUMBER 89	BELL CO ID	핔	IX CARRIER	L RAO IX CARRIER IND CO ID
7	TOTAL REC.			<b>)</b> 19		D D D	6666
באנים באנים	COUNT COUNT	DATE CREATED	INVOICE NUMBER	BELL CO ID	BELL RAO	IX CARRIER	ב ב ב
	666666 666666	66-66-66	66	66	666	666	6686

ERRORS ERROR CODE ERROR MESSAGE

## SUBAPPENDIX C (CONT'D) MESSAGE VALIDATION PACK REJECT REPORT (A7287)

M M	ERROR CODE	ERROR MESSAGES	3
1			_
	EC01.2	First record after the	_
ပ္ထု	EC03.2	From RAO is not	
ပ္ထု	EC04.3	Invoice number of L	
ğ	EC04.5	Company ID not a meader invalid.	
S S	EC04.6	Independent Comment.	
EC04.7	4.7	Header Record In 12 12 11 11 12 11 11 11 11 11 11 11 11	
EC04.8	4.8	Trailer Record ID is invalid	
EC04.9	4.9	Trailer Record Count Page 1	
EC05.0	5.0	Dublicate pack	
E035.1	5.1	Old Pack.	
EC05.2	5.2	RAO not found on table	
EC07.3	.3	Error rate greater than invoice file the	
		number.	
EC12.0		Remote ID in Dataset is not velid	
EC20.0		No detail records in pack	
EC13.0		Invalid status on Pack Header	
EC27.0		Pack exceeds limit of 9 999 detail	
EC40.9		Pack Header record is missing	
E01.0		Trailer record is missing	
EC42.0		Traller message volume is not equal to	
E 2.2.5		accumulated message volume.	
		Header/Trailer date is invalid.	
EC43.0		From RAO on Trailer Record is not equal to the from RAO on	
EC48.0		Voice number on Trailer B	
	ž	number on the Header Deage.	
	1	COOK STORY	

SUBAPPENDIX D - MESSAGE VALIDATION PACK ACCEPTED REPORT (A7288)

							٠				
EATED TOTAL		ORD RECORD	622.22	22.229	22.229	.ZZ9	672.22	22.229	22.229	22.229	27.779
	M/DD/YY	REC ECTED	22.228	22.229	22.229		22.229	22.229	22.229	22.229	822.22
NOOF POOF		VALIDREJ	22.229	677.72	27.77		622.22	22.229	22.229	22.229	22.229
			OUTWATS (NON-SMDR)	OUTWATS (SMDR)	ZZ.ZZZ9 800 SERVICE	MT 2Z.ZZ 9ZZ.ZZ	NON-DIAL CONFER BRIDGE 22.2229	ON-DIAL CONFER LEG RECORD 22.2229	DIAL CONFERENCE BRIDGE 22.2229	ZZ.ZZZ9 ALLIANCE (AGTC)	DIAL-IT SERVICE
			22.223	22.2229	ZZ.ZZ29 FAL WATS/80	6727.72	27.2729	N 22.22.22	22.2229	22.223	
		JF RECORD	6222.22	22.2229	9222.22 TOT	622272	22.2229	22.2229	22.2229	22.2229	
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Attachment 8		DIRECTORY ASSISTANCE 29	MARINE/AIRCRAFT	RADIO LINK	MARINE NON-DIAL CONFER BRIDGE	MARINE NON-DIAL CONFER LEG REC. 229 22.2229	OTHER MTS RECORDS		IOTC/IDDD MTS	IOTC/IDDD OTHERS	IOTC BFC MTS	IOTC BFC OTHERS	IOC MTS	IOC OTHERS	IOC MTS 22.229	IOC OTHERS	OUTWATS LINE SUMMARY
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Attachment 8	800 LINE SUMMARY	DIR. ASSISTANCE LINE SUMMARY ZZ.ZZZ9	CREDIT REQUESTS	CANCEL REQUESTS	CORRECTION REQUESTS		22.223
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## **SUBAPPENDIX E**

PAPER COPY OF A REPORT TO BE INCLUDED WITH DISTRIBUTION

## SPECIAL FEATURES STAR SERVICES SUBAPPENDIX F

The following are STAR Services supported by these Local Resale requirements to date. When identified, additional services can be negotiated to be included in this Resale offer.

This feature allows a customer to redial a number when a Busy signal is encountered. Busy Redial/..... Last Number Redial =

This feature allows a customer to automatically return the most recent ?) Call Return/Missed Call Dialing.......

incoming call, even if it is not answered.

This feature allows the tracing of nuisance calls. Call Trace

This feature allows for three (3) parties to communicate on one line.

o provide for the transfer and billing of these features the following requirements apply:

Automatic Redial.....

3-Way Calling.....

For all "per use" STAR Features the 'Miscellaneous Charge Line Summary Non-Detail Charge' 425001 record should be used and be populated as follows:

	POSITIONS 55 - 60	MUST BE DODIII ATED
MISCELLANEOUS TEXT CODE	POSITIONS 168 - 172	1) BUSY REDIALLAST NUMBER REDIAI
AISCEL ANEOLIG STENT DOOR		POPULATE WITH 100001
SCELLANEOUS LEAT CODE	POSITIONS 168 - 172	2) CALL RETURNICAST NUMBER REDIAL
HOCE!! ANEO! IS TEXT SOLD		POPULATE WITH 'nnnn':
MISSELLAINEOUS IEXI CODE	POSITIONS 168 - 172	3) CALL TRACE
POCEL ANICOLIS TEXT		POPULATE WITH 'nnon'
MISCELLANEOUS LEXT CODE	POSITIONS 168-172	4) 3-WAY CALLING
		PODI II ATE WITH ISSUES

POSITIONS 168-172 MISCELLANEOUS TEXT CODE

5) AUTOMATIC REDIAL POPULATE WITH '00005'

NOTE: For fields not specifically defined, the standard EMR format for a 425001 record should be used.

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### LOCAL NUMBER PORTABILITY

- 1.1 General Terms.
- 1.1.1 The Parties shall provide Interim Number Portability (INP) on a reciprocal basis to the extent technically feasible.
- 1.1.2 Until permanent number portability is implemented by the industry pursuant to regulations issued by the FCC or the Commission, the Parties agree to provide INP to each other through Remote Call Forwarding, Direct Inward Dialing, Route Indexing, or other appropriate means as agreed to by the Parties.
- 1.1.3 Once permanent number portability is implemented pursuant to FCC or state commission regulation, either Party may withdraw, at any time and at its sole discretion, its INP offerings, subject to advance notice to the other Party with sufficient time to allow for coordination to allow the seamless and transparent conversion of INP customer numbers to permanent number portability. Upon implementation of permanent number portability pursuant to FCC regulations, both Parties agree to conform and provide such permanent number portability. Parties agree to expeditiously convert customers from interim number portability to permanent number portability, provided that the interim service is not removed until the customer has been converted.
- 1.1.4 USWC will update and maintain its Line Information Database ("LIDB")listings for numbers retained by AT&T and its customers, and restrict or cancel calling cards associated with these forwarded numbers as directed by AT&T. Further, USWC will not block third party and collect calls to those numbers unless requested by AT&T.
- 1.1.5 The ordering Party shall specify on a per telephone number basis which method of INP is to be employed and the providing Party shall provide such method to the extent technically feasible.
- 1.1.6 Where either party has activated an entire NXX, or activated a substantial portion of an NXX with the remaining numbers in that NXX either reserved for future use or otherwise unused, if these customer(s) served within the NXX choose to receive service from the other Party, the first Party shall cooperate with the second Party to have the entire NXX reassigned in the Local Exchange Routing Guide (LERG) (and associated industry databases, routing tables, etc.) to an End Office operated

by the second Party. Such transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry recognized NANP lead-times for movement of NXXs from one switch to another.

- 1.2 Description Of Service
- 1.2.1 Interim Number Portability Service ("INP") is a service arrangement that can be provided by USWC to AT&T or by AT&T to USWC.

Interim Number Portability (INP) applies to those situations where an end-user customer elects to change service provider and further elects to retain its existing or reserved telephone number(s). INP consists of providing the capability to route calls placed to telephone numbers assigned to one party's switches to another party's switches.

- 1.2.2 INP is available as INP-Remote Call Forwarding ("INP-RCF") permitting a call to a USWC assigned telephone number to be translated to AT&T's dialable local number. AT&T may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible on a per path basis. AT&T will need to specify the number of simultaneous calls to be forwarded for each number ported.
- 1.2.3 DID is another INP method that makes use of direct inward dialing trunks. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between the USWC end office and the AT&T switch. Traffic on these trunks cannot overflow to other trunks, so the number of trunks shall be conservatively engineered by USWC. In addition, inter-switch signaling is usually limited to multi-frequency (MF). This precludes passing Calling Line ID to the AT&T switch.
- 1.2.4 Route Indexing
- 1.2.4.1 RI-PH will route a dialed call to the USWC switch associated with the NXX of the dialed number. The USWC switch shall then insert a prefix onto the dialed number which identifies how the call is to be routed to AT&T. The prefixed dialed number is transmitted to the USWC tandem switch to which AT&T is connected. Route indexing is only available with seven digit local dialing.

The prefix is removed by the operation of the tandem switch and the dialed number is routed to AT&T's switch so the routing of the call can be completed by AT&T.

- DN-RI is a form of RI-PH that requires direct trunking between the USWC switch to which the ported number was originally assigned and the AT&T switch to which the number has been ported. The USWC switch shall send the originally dialed number to the AT&T switch without a prefix.
- 1.2.4.3 USWC shall provide RI-PH or DN-RI on an individual telephone number basis, as designated by AT&T. Where technically feasible, calls to ported numbers are first directed to the AT&T switch over direct trunks but may overflow to tandem trunks if all trunks in the direct group are occupied.
- 1.2.4.4 For both RI-PH and DN-RI the trunks used may, at AT&T's option, be the same as those used for exchange of other local traffic with USWC. At AT&T's option, the trunks shall employ SS7 or in band signaling and may be one way or two way.
- 1.2.5 INP is subject to the following restrictions:
- 1.2.5.1 An INP telephone number may be assigned by AT&T only to a AT&T's customer located within USWC's local calling area and toll rating area that is associated with the NXX of the portable number. This restriction is to prevent the possibility of customers using number portability to extend the local calling area.
- 1.2.5.2 INP is applicable only if AT&T is engaged in a reciprocal traffic exchange arrangement with USWC.
- 1.2.5.3 INP is not offered for NXX Codes 555, 976, 960 and 1+ sent-paid telephones, and Service Access Codes (i.e. 500, 700, 800/888, 900). INP is not available for FGA seven-digit numbers (including foreign exchange (FEX), FX and FX/ONAL and foreign Central Office Service). Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.
- 1.2.5.4 The ported telephone number will be returned to the switch which originally had the ported number when the ported service is disconnected. The normal intercept announcement will be provided by the porting company for the period of time until the telephone number is reassigned.
- 1.2.5.5 Within thirty (30) days after the Effective Date, USWC shall provide AT&T a list of those features that are not available for INP telephone numbers due to technical limitations.

1.3	Ordering and Maintenance
1.3.1	AT&T is responsible for all direct interactions with AT&T's end users with respect to ordering and maintenance.
1.3.2	Parties are responsible for complying with the Customer Authorization (CA) process as described in this document.
1.3.3	USWC shall exchange with AT&T SS7 TCAP messages as required for the implementation of Custom Local Area Signaling Services (CLASS) or other features available in the USWC network.
1.3.4	The Parties' designated INP switch must return answer and disconnect supervision to the other Parties' switch.
1.3.6	In accordance with the current ICONN specifications, USWC shall disclose to AT&T any technical or capacity limitations that would prevent use of a requested INP in a particular switching office.
1.3.7	The Parties will develop and implement an efficient deployment process to ensure call routing integrity for toll and local calls, with the objective to eliminate customer downtime.
1.3.9	Both the incoming and outgoing service providers should send a CARE transaction 2231 to notify IXC that access is now provided by a new service provider for that number.

### 2. PERMANENT NUMBER PORTABILITY (PNP).

- 2.1 Upon implementation of Permanent Number Portability (PNP) pursuant to FCC regulations, both Parties agree to conform and provide such Permanent Number Portability. To the extent consistent with the FCC rules as amended from time to time, the requirements for PNP shall include the following:
- 2.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC rules and regulations.
- 2.3 The PNP network architecture shall not subject alternate local exchange carriers to any degradation of service compared to USWC in any relevant measure, including transmission quality, switching and transport costs, increased call set-up

- time and post-dial delay, and AT&T shall not be required to rely on the USWC network for calls completing to its ported customers.
- 2.4 When an office is equipped with PNP, all NXXs in the office shall be defined as portable and translations will be changed in the Parties' switches to open those NXXs for database queries. If a switch serves multiple rate centers, then at a minimum, all of the NXXs for a rate center in that switch shall be made portable when any one of them is turned up.
- 2.5 When an NXX is defined as portable, it shall also be defined as portable in all PNP-capable offices which have direct trunks to the given switch.
- 2.6 Upon introduction of PNP in an MSA, the applicable switches will be converted according to a published schedule with no unreasonable delay. All portable NXXs shall be recognized as portable, with queries launched from these switches.
- 2.7 Prior to implementation of PNP, the Parties agree to develop, implement, and maintain efficient methods to maintain 911 database integrity when a subscriber ports to another service provider. The Parties agree that the customer should not be dropped from the 911 database during the transition.
- 2.8 When a subscriber ports to another service provider and has previously secured a reservation of line numbers from the donor provider for possible activation at some future point, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber. So long as AT&T maintains the reserved numbers, USWC shall not reassign said numbers. The Parties will allocate the revenue generated from number reservations in accordance with a Schedule to be mutually agreed upon by the Parties within ninety (90) days of the Effective Date of this Agreement.
- 2.9 The Parties will develop and implement an efficient deployment process to ensure call routing integrity for toll and local calls.
- 2.10 Both AT&T and USWC shall:
- 2.10.1 Support all emergency and operator services.
- 2.10.2 Use scarce numbering resources efficiently and administer such resources in a competitively neutral manner.
- 2.10.3 Jointly cooperate with each other to provide the information necessary to

rate and bill all types of calls.

- 2.10.4 Jointly cooperate with each other to apply PNP consistently on a nationwide basis, and in accordance with all Federal Communication Commission directives.
- A ten-digit code, consistent with the North American Numbering Plan, shall be used as a network address for each switch that terminates subscriber lines, i.e. an end office. This address shall support existing six-digit routing and may be implemented without changes to existing switch routing algorithms. In existing end offices, this address shall be selected from one of its existing NPA-NXXs. New end offices shall be assigned an address through normal administrative processes.
- 2.12 PNP employs an "N-1" (N minus 1) Query Strategy for interLATA or intraLATA toll calls, by which the originating carrier will pass the call to the appropriate toll carrier who will perform a query to an external routing database and efficiently route the call to the appropriate terminating local carrier either directly or through an access tandem office.
- 2.13 USWC shall furnish AT&T with the first six digits of the originating address when it supplies AT&T with the Jurisdiction Information Parameter for the Originating Address Message.
- USWC agrees to begin the introduction of PNP to end user subscribers who may begin changing local service providers and retaining their existing telephone number based on the time line set out by the FCC in its Telephone Number Portability Order (CC Docket No. 95-116), or as per a State order if such time for introduction of PNP set by the State is earlier than would result under the FCC Order.
- 2.15 The generic requirements for the PNP alternative implemented will be in accordance with industry standard specifications.
- 2.16 Additional PNP Requirements
- 2.16.1 For a local call to a ported number, the originating carrier is the "N-1" carrier. It will perform an external database query as soon as the call reaches the first PNP-capable switch in the call path and pass the call to the appropriate terminating carrier. An PNP-capable originating switch shall query on a local call to a portable NXX as soon as it determines that it (the originating switch)

does not serve the dialed number.

- 2.16.2 USWC shall be the default carrier for database queries where a participating carrier is unable to perform its own query due to abnormal conditions.
- 2.16.3 USWC will provide AT&T PNP for subscribers moving to a different location, or staying at the same location, within the same rate center area.

### 2.17 SMS Administration

USWC will work cooperatively with other local service providers to establish the PNP Service Management System (SMS). The SMS shall be administered by a neutral third party, to provide for the efficient porting of numbers between carriers. There must be one exclusive NPAC per portability State or region, and USWC shall provide all information uploads and downloads regarding ported numbers to/from, respectively, the exclusive NPAC. USWC and AT&T shall cooperate to facilitate the expeditious deployment of PNP through the process prescribed by the FCC, including, but not limited to, participation in the selection of a neutral third party and development of SMS, as well as SMS testing for effective procedures, electronic system interfaces, and overall readiness for use consistent with that specified for Provisioning in this Agreement.

### 3. Requirements for INP and PNP

Intentionally deleted.

### 4. ACCESS TO TELEPHONE NUMBERS

- 4.1 Number Resources Arrangements
- 4.1.1 Nothing in this Agreement shall be construed in any manner to limit or otherwise adversely impact either Party's right to the request and assignment of any NANP number resources including, but not limited to, central office (NXX) codes pursuant to the Central Office Code Assignment Guidelines (last published by the Industry Numbering Committee ("INC") as INC 95-0407-008, Revision 4/19/96, formerly ICCF 93-0729-010). NXXs, and the initial points of interface for interconnection between the Parties' networks, will be included in Addenda to this Agreement.

- 4.1.2 To the extent USWC serves as Central Office Code Administrator for a given region, USWC will support all AT&T requests related to central office (NXX) code administration and assignments in the manner required and consistent with the Central Office Code Assignment Guidelines.
- The parties shall provide local dialing parity to each other as required under Section 251(b)(3) of the Act.
- 4.1.4 The Parties will comply with code administration requirements as prescribed by the Federal Communications Commission, the Commission, and accepted industry guidelines.
- It shall be the responsibility of each Party to program and update its own switches and network systems pursuant to the Local Exchange Routing Guide (LERG) guidelines to recognize and route traffic to the other Party's assigned NXX codes at all times. Neither Party shall impose any fees or charges whatsoever on the other Party for such activities. The Parties will cooperate to establish procedures to ensure the timely activation of NXX assignments in their respective networks.
- 4.1.6 Each Party shall be responsible for notifying its customers of any changes in numbering or dialing arrangements to include changes such as the introduction of new NPAs or new NXX codes.
- 4.1.7 Until an impartial entity is appointed to administer telecommunications numbering and to make such numbers available on an equitable basis, USWC will assign NXX codes to AT&T in accordance with national guidelines at no charge.
- 4.1.8 Each Party is responsible for administering NXX codes assigned to it. Each Party is responsible for obtaining Local Exchange Routing Guide ("LERG") listings of CLLI codes assigned to its switches. Each party shall use the LERG published by Bellcore or its successor for obtaining routing information and shall provide all required information to Bellcore for maintaining the LERG in a timely manner.

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### **NETWORK SECURITY**

### **Protection of Service and Property**

- 1. Each Party shall exercise the highest degree of care to prevent harm or damage to the other Party, its employees, agents or customers, or their property as its employees protect its own personnel, customers and property. USWC, its employees, agents, or representatives agree to take reasonable and prudent steps to ensure the adequate protection of AT&T property and services, including, but not limited to:
- 1.1 restricting access to AT&T equipment, support equipment, systems, tools and data, or spaces which contain or house AT&T equipment enclosures, to AT&T employees and other authorized non-AT&T personnel to the extent necessary to perform their specific job function.
- 1.2 furnishing to AT&T a current written list of USWC's job titles who USWC authorizes to enter spaces which house or contain AT&T equipment or equipment enclosures, with samples of the identifying credentials to be carried by such persons.
- 1.3 complying at all times with AT&T security and safety procedures and requirements, including but not limited to sign-in, identification, and escort requirements while in spaces which house or contain AT&T equipment or equipment enclosures and compliance with AT&T Corporate Security Instructions (CSIs) 1.01 "Admission to AT&T Premises", January 1987, CSI 1.10 "Physical Security For Shared Premises", Issue A, January 1987, and CSI 1.13 "Physical Security Criteria For Elements of the Network", Issue A, June 1987.
- 1.4 allowing AT&T to inspect or observe spaces which house or contain AT&T equipment or equipment enclosures at any time and to furnish AT&T with all keys, entry codes, lock combinations, or other materials or information which may be needed to gain entry into any secured AT&T space.
- 1.5 agreeing to partition any access device systems, whether biometric or card reader, or types which are encoded identically or mechanical coded locks on external doors or on internal doors to spaces which house AT&T equipment.
- 1.6 insure that the area which houses AT&T's equipment is adequately secured and monitored to prevent unauthorized entry at parity with the security and monitoring USWC provides to itself.

- 1.7 limiting the keys used in its keying systems for spaces which contain or house AT&T equipment or equipment enclosures to its employees and representatives to emergency access only. AT&T shall further have the right to change locks where deemed necessary for the protection and security of such spaces so long as such changes do not violate local and/or state building and/or fire codes.
- 1.8 installing security studs in the hinge plates of doors having exposed hinges with removable pins if such leads to spaces which contain or house AT&T equipment or equipment enclosures.
- 1.9 controlling unauthorized access from passenger and freight elevators by continuous surveillance or by installing security partitions, security grills, locked gates or doors between elevator lobbies and spaces which contain or house AT&T equipment or equipment enclosures at parity with the security measures USWC takes to protect its own facilities.
- 1.10 providing real time notification to designated AT&T personnel to indicate an actual or attempted security breach.
- 1.11 providing an acceptable back-up and recovery plan to be used in the event of a system failure or emergency.

### 1.12 installing controls:

- to disconnect a user for a pre-determined period of inactivity on authorized ports;
- to protect customer proprietary information; and,
- to databases to ensure both ongoing operational and update integrity.

### 1.13 providing Logical Security:

- assuring that all approved system and modem access be secured through security servers. Access to or connection with a network element shall be established through a secure network or security gateway.
- agreeing to comply with AT&T Corporate Security Instruction 3.03
   "Computer Security Requirements," March 1993, and AT&T Network Security Requirements 4.0, March 1996.

1.14 ensuring that areas designated to house AT&T equipment are environmentally appropriate for the AT&T equipment installation, and adequate to maintain proper operating conditions for the AT&T equipment.

### 2. Revenue Protection

- 2.1 USWC shall make available to AT&T all present and future fraud prevention or revenue protection features, including prevention, detection, or control functionality embedded within any of the network elements. These features include, but are not limited to screening codes, call blocking of international, 800, 900, 976, and 700 numbers and the capability to require end-user entry of an authorization code for dial tone. USWC shall additionally provide partitioned access to fraud prevention, detection and control functionality within pertinent Operations Support Systems ("OSS") which include but are not limited to Line Information Data Base\_Fraud monitoring systems, High Toll Notifiers, SS7 suspect traffic alerts, AMA suspect traffic alerts, etc.
- 2.2 Uncollectible or unbillable revenues resulting from, but not confined to, provisioning, maintenance, or signal network routing errors shall be the responsibility of the party causing such error.
- 2.3 Uncollectible or unbillable revenues resulting from the accidental or malicious alteration of software underlying Network Elements or their subtending operational support systems by unauthorized third parties shall be the responsibility of the party having administrative control of access to said Network Element or operational support system software.
- 2.4 USWC shall be responsible for any uncollectible or unbillable revenues resulting from the unauthorized physical attachment to loop facilities from the Main Distribution Frame up to and including the Network Interface Device, including clip-on fraud except where the fraud was conducted under circumstances beyond the reasonable control of USWC or where negligence on the part of an AT&T end user was a contributor. USWC shall provide soft dial tone to allow only the completion of calls to final termination points required by law.

### 3. Law Enforcement Interface

USWC shall provide seven day a week/ twenty-four hour a day installation and information retrieval pertaining to traps, assistance involving emergency traces and information retrieval on customer invoked CLASS services, including, without limitation,

call traces requested by AT&T. USWC shall provide all necessary assistance to facilitate the execution of wiretap or dialed number recorder orders from law enforcement authorities.

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# 1. AT&T Supplier Performance Quality Management System

AT&T's approach to quality and reliability focuses on the attainment of excellence for products and services ordered from suppliers and used by AT&T. This excellence is the result of a systematic effort that is sustained over time. AT&T requires its key suppliers to use an approach for achieving excellence that encompasses ten initial areas outlined below. AT&T shall compensate USWC for the proportionate share of the additional economic costs whenever AT&T requests the use of facilities not currently in place or when it requests services or facilities demonstrably superior in quality to the highest quality of the following three items: (a) requirements of the FCC rules; (b) requirements of Commission rules or orders; or (c) the level of quality USWC provides to itself or its Affiliates.

## 1.1 Quality Manual

Within three months after execution of this Agreement ("Contract Initiation"), the parties shall develop a Quality Manual that describes the boundaries of the process(es) and documents the following:

Management Responsibility and Support
Quality System
Document Control
Process Control
Product Development Control
Alignment of Process Output with Customer Requirements
Identification of Non-conforming Product or Service
Analysis of the Non-conformance
Corrective Action Plans
Quality records
Audits and Reviews
Training

Provide for review and concurrence by AT&T quarterly. For each area, submit documentation of ownership and escalation for issue resolution.

## 1.2 Process Ownership

Within three months after Contract Initiation, the parties shall identify and document the Process Owners/Leaders within USWC by name. Acceptable documentation will also provide organizational accountability for this process ownership. The parties shall identify

those individuals who have Quality Management responsibilities for processes which affect AT&T services or services branded as AT&T. Thereafter, the parties shall provide written updates within a week of changes in personnel, organization or linkages.

#### 1.3 Process Definition

Within three months after Contract Initiation, the parties shall provide initial process documentation. The definition of the process shall include, at a minimum:

- (a) input requirements
- (b) value-added process functionality
- (c) output requirements which meet customer satisfaction

Thereafter, each party shall provide written updates within a week of changes in personnel, organization or linkages.

# 1.4 Measurement System

Define and implement a Measurement System which provides data that assures that the product or service conforms to requirements and which provides data bases to perform source cause and root cause analysis. The output of the Measurement System will demonstrate compliance with AT&T requirements. The parties shall prepare and submit initial documentation of the Measurement System within 60 days after Contract Initiation. Changes to this System must be approved by AT&T prior to their implementation. The initial outputs of the System for all services are expected within 30 days after Contract Initiation. Thereafter, metrics will be reviewed monthly with AT&T and will be available for review and analysis, as needed for all services. Measurements are required to be AT&T specific and to support AT&T service performance requirements.

# 1.5 Improvement Plan Implementation

USWC will be subject to monthly service performance and improvement reviews by AT&T. Documentation will include gap closure plans ("Gap Closure Plans") which result in compliance with AT&T's expected performance and include:

- (a) evaluation of the opportunity for continuous improvement, systems enhancements and re-engineering
- (b) forecasted improvements to the desired Measure of Quality (MOQ) for each issue or initiative

- (c) current and improved upon processes
- (d) control processes which management will use for the transitional period
- (e) evaluation of pertinent changes in periodic (monthly, weekly) results
- (f) opportunities for source and root cause analysis
- (g) a date for compliance with AT&T's expected performance

These Gap Closure plans will be reviewed by the parties monthly or, more frequently, as updated data and analyses are available.

# 1.6 AT&T Leadership Reviews

USWC senior leadership shall assure USWC's active interaction with AT&T on at least a quarterly basis. This senior leadership is expected to assure that resources are provided within USWC which support implementation of this Supplier Performance Quality Management Program. Review by AT&T of USWC's staffing, training and organizational effectiveness in meeting service requirements will be part of such communications.

# 1.7. Communication, Emergency Restoration, and Complaint Resolution

AT&T and USWC personnel and systems need to interact at many levels and the parties shall develop and implement plans for numerous circumstances. These circumstances shall include, but not be limited to:

1.7.1 Real-time communication of significant performance degradations or interruptions and their restoration activities as these may occur. These services may be at overall network or specific end-user levels, as determined by AT&T and shall include emergency restoration processes for AT&T services, including business day, evening, and weekend coverage. The parties shall identify remote [non-staffed] offices, USWC shall document and provide "call out" procedures to AT&T at Contract Initiation.

If a network service degradation or outage occurs, USWC will provide realtime channels for assuring identification of the extent of disruption, the likely duration of outage or degradation, and the process and time for restoral. USWC shall appoint a responsible single point of contact and become active in the resolution of such emergencies. Identification of this contact will be provided to AT&T within 15 minutes of the condition. Progress calls to AT&T are required at least at hour intervals. All service affecting conditions will be worked on a 7-day, 24-hour basis unless there is specific written release from AT&T to do otherwise. Documentation of the circumstances and resolution for such an occurrence will be provided to AT&T within 2 days of the resolution of the occurrence.

- 1.7.2 Ongoing work-site to work-site communications occur in the course of providing service. When those contacts fail to resolve specific service performance problems, AT&T shall have the right to invoke escalation procedures. USWC shall provide documentation of this process on a 7-day, 24-hour basis, for each USWC office which serves AT&T. This documentation is required at the time of Contract Initiation; changes are to be provided by USWC to AT&T in writing within one week of their occurrence.
- 1.7.3 A formal complaint resolution process is to be documented by USWC within 30 days of the Contract Initiation. AT&T has the right to approve such process. USWC shall cooperate in good faith with AT&T in modifying such process to accommodate AT&T's reasonable business concerns. All formal complaints will be provided to USWC in writing, although initial transaction about the matter may need to be verbal so as to most quickly resolve the problem at hand. USWC shall respond to any formal complaint within 24 hours after it is initially reported by AT&T, with resolution at the earliest possible time. All such complaints will be part of the next senior leadership review.

## 1.8. Disaster Recovery

USWC shall establish and maintain a Disaster Recovery/Restoration Plan for the network infrastructure within ninety (90) days after Contract Initiation. Such plan must be disclosed to AT&T and shall include, at a minimum, the following:

Scope and General Responsibilities: Define disaster threshold and responsibilities of various levels of management.

Scope of Disaster And Assessment of Damage: Define notification and reporting responsibilities for expedient damage assessment

Emergency Organization: Define the major emergency organization which will function as the control center during a crisis that is either company-wide or is isolated to portions of the State. Define procedures for activating the emergency control center.

Emergency Restoration Procedures: Describe the steps for restoration of service

to be considered during a major service interruption. Describe thresholds/time intervals for restoral. Describe the escalation procedure to monitor abnormal conditions.

Emergency Telephone Number List: List emergency notification numbers.

Restoration Equipment: Provide physical description of restoration equipment.

Restoration Equipment Dispatch Plan: Documented procedure on how the restoration equipment will be dispatched to a restoration site.

Restoration Network Elements: Provide connectivity for customer loops and other unbundled elements (e.g. DS3) as appropriate to an AT&T provided emergency restoration trailer.

Termination of Emergency and Final Report: Issuance of reports on estimated damage to AT&T.

USWC shall also establish and maintain a Disaster Recovery/Restoration Plan for Work Centers and Operation Support Systems including Pre-Order, Ordering/Provisioning, and Maintenance/Repair functions. Such plan(s) must be disclosed to AT&T and shall include, at a minimum, the following:

Disaster Recovery Strategy: Describe the objectives of the work center.

Roles and Responsibilities: Describe the overall roles/responsibilities and function of center personnel in a disaster situation.

Extended Failures: Describe the transfer to an alternate site procedure.

Voice Communication: Describe voice/phone communications transfer procedure.

Power: Provide power information within the centers and transfer procedures in the event of a power failure.

Operation Support Systems Backup: Describe the procedures in the event of a system failure.

Emergency Notification List: Provide a list of names/numbers to be notified in the event of a disaster.

USWC Single Point of Contact Responsible For: Activation of the USWC Disaster Recovery Plan and for providing status and problem resolution during the entire restoration process.

# 1.9 Performance Monitoring

AT&T's approach to service quality and reliability requires that USWC actively engage in performance monitoring and in real-time management review of, and participation in, performance level assurance. Deployment of self-restorative technologies is critical in keeping with the Supplier Quality Performance Management Program goal of continuous improvement.

# 1.10 Integration of AT&T Requirements

AT&T expects that USWC's personnel will integrate the techniques of the Supplier Performance Quality Management Program in all aspects of the work that they perform on AT&T's behalf. Particularly in those areas in which USWC personnel represent AT&T to the end-use customer, USWC shall insure that the responsible individuals receive effective training and ongoing coaching to assure that their interactions with AT&T's customers follow the intent and detail of agreements for AT&T branded and non-branded services. USWC shall provide to AT&T, upon its request, copies and training materials used for this purpose. AT&T expects that USWC will evaluate its personnel in accordance with these agreements and in accordance with provisions of the Supplier Performance Quality Management Program and that documentation of compliance be available to AT&T upon request.

## 2. Metrics and Gap Closure Plans

The metrics in this Attachment are tracked and measured on a monthly basis. These monthly performance results are managed as part of the Supplier Performance Quality Management System (SPQMS).

SPQMS requires that when the monthly results do not meet the required performance levels described in this Attachment, Gap Closure Plans are implemented to improve performance. These Gap Closure Plans include:

 evaluation of the opportunity for continuous improvement, systems enhancements and re-engineering;

- forecasted improvement to the desired DMOQ for each issue or initiative;
- evaluation of pertinent changes in periodic (monthly, weekly) results;
   and:
- a date for compliance with AT&T's expected performance.

The Gap Closure Plans will be reviewed monthly by AT&T, or more frequently as updated data and analysis are available. USWC shall modify its Gap Closure plans to accommodate AT&T's reasonable business concerns.

# 3. Direct Measures of Quality (DMOQS)

#### 3.1 Credits for Failure to Meet DMOQs

USWC will credit AT&T the amounts as referenced in this Attachment, as it may be amended from time to time, against charges due from AT&T to USWC for all Local Services, Network Elements or Combinations provided to AT&T for failures to meet the DMOQs specifying timeliness and accuracy required by this Agreement for pre-order activities, order/provisioning, maintenance/repair, billing and network quality of such Local Services, Network Elements or Combinations.

#### 3.2 DMOQ Categories

The parties have agreed to five categories for the DMOQs: (a) Billing, (b) Operator Services and Directory Assistance, (c) Pre-Order/Order/Provisioning and Maintenance/Repair, (d) Interconnection, and (e) Unbundled Elements. Each such category of DMOQ includes metrics which focus on timeliness, accuracy and network quality. Such DMOQ categories, detailed metrics associated with the DMOQs, Per Occurrence Credits as defined below, requirements and performance indexes are included herewith as an appendix to this Attachment 11.

#### 3.3 Determination of Credits

The credits referenced in paragraph 3.1 above shall be determined in two manners described below.

3.3.1 Per Occurrence Credits. For each occurrence of certain delays or

failures of USWC under this Agreement, USWC shall credit to AT&T the amounts which correspond with such delays or failures. The specific DMOQs to which Per Occurrence Credits apply, the delays or failures and the credit amounts which correspond to such delays or failures are listed in Appendix A to this Attachment 11. By way of example, and not by way of limitation, if a Service Order is not installed or provisioned by the Due Date or Interval specified in this Agreement, USWC shall credit AT&T with the full amount of the applicable non-recurring installation charge for that order.

3.3.2 Overall Performance Credits. In addition to the Per Occurrence Credits described in paragraph 3.3.1 above, USWC is subject to Overall Performance Credits as described in this paragraph 3.3.2. AT&T will rate USWC's performance under this Agreement based on the performance requirements allocated to each metric identified in Appendix B to this Attachment 11. Each month, AT&T will tabulate USWC's performance hereunder based on the metrics, and performance criteria and using the formulas set forth in Appendix B. In each case where USWC falls below the standard of performance established pursuant to this Agreement, USWC shall provide AT&T with a corresponding percent credit against AT&T's entire bill for services under this Agreement for the period of such deficient performance, which credit will be determined as set forth in Appendix B. Such Overall Performance Credits shall fall within the range of 0% up to and including 10%.

#### 3.4 Changes to DMOQs

The parties acknowledge that during the term of this Agreement the need will arise for changes to the DMOQs and related elements set forth in this Agreement. Such changes may include, but are not limited to, the addition or deletion of metrics, the change in the performance standard for any particular metric, a change in weighting, or a change in associated performance credits. The parties shall review the DMOQs and their associated metrics and performance criteria from time to time. Changes shall become a part of this Agreement upon the mutual agreement of USWC and AT&T. Service quality remains subject to the Orders and rules of the Commission, contrary provisions of this Agreement notwithstanding.

#### **APPENDIX A**

# **Per Occurrence Credits**

Selected quality measures which are critical to customer satisfaction have an associated per occurrence credit due to AT&T for specific lack of performance as described in the following table:

DMOQ	Occurrence	Credit
Service Order Provisioning Commitment Missed	Each instance of failure to meet commitment	For customer specific orders, waiver of the installation non-recurring charge and 1 months recurring charge for the applicable service or element.
		For Network Elements or Combination orders that are not specific to an individual customer, \$2,500 per day, with further review in compliance filing on DMOQs, for each day of delay, plus waiver of any applicable installation or service ordering charges.
Maintenance/Repair Estimated Time To Restore (ETTR) missed by greater than 24 hours	Each instance of failure to complete restoration within 24 Hours of ETTR	1 months recurring charge for the applicable service or element for each additional 24 hours past the ETTR
New Service Trouble	Each instance of trouble within the first 30/60 days as appropriate for the specific type of service	Waiver of the installation non-recurring charge and 1 months recurring charge for the applicable service or element.
Missed Appointments	Each instance of a missed customer appointment	2 months recurring charge for the applicable service or element

Repeat Trouble	Each instance of repeat trouble within 60 days	2 months recurring charge for the applicable service or element
Notice of Change in Availability of Service Offerings	Each occurrence of failure to provide notice at least 45 days prior to the effective date	\$2,500
Recorded Usage Data	Each instance Recorded Usage Data for a specific date is provided beyond the intervals specified in Attachment 8 and for each day and successive days that Recorded Usage Data is not provided in accordance with the DMOQs specified in this Attachment.	An amount which is the product of the number of messages delayed times the average revenue per message, as provided by AT&T, times the number of days delayed, divided by thirty.

Network Performance:		
Switched Network Event		
	Each instance of 5000 or	<b>\$</b> 2,500
	more blocked call attempts	<b>42,300</b>
·	•	
	within 10 minutes in a	
0007	single exchange	
CCS7 network event		
	Each instance of an outage	\$2,500
	due to Signaling links,	
	SCPs, STPs, Database	
	Integrity, etc. that is >= 2	
	sec. that affects call	
	completion and/or	· · · · · · · · · · · · · · · · · · ·
	database feature	
Routing to AT&T	functionality access.	<u> </u>
Operator	functionality access.	
Services/DA platform		\$2,500
Gervices/DA piatrofffi	Each instance of 1000 or	
	more calls to AT&T's OS	
. [	platform blocked due to	i
	USWC responsible	
1	equipment, facility,	
	software or human/process	
Customer specific	error.	\$100 per incident per line or
service		per DS-0 equivalent circuit,
or Unbundled Element/	Each instance of Resale	per day.
Combination	Services, Network	per day.
performance	Elements or Combinations	
	not meeting the applicable	
1		
	performance specifications	·
	in this Agreement (e.g.	
	Dedicated DS-1 accuracy)	
Operations/System		\$2,500 per system required in
Readiness Testing to	Each instance of failure to	each functional area per each
readiless resting to	test each of the systems	full week (7 days) or partial
establish system readiness	used between AT&T and	week of delay.
capabilities (per state)	USWC work centers for	wook or college
	each functional area at	·
4	least ninety (90) days prior	
	to commencement of	· · · · · · · · · · · · · · · · · · ·
1	USWC's provision of Local	
1		
1	Service or at for a shorter	
1	time agreed to by AT&T in	
	writing. The functional	l.
· · · · · · · · · · · · · · · · · · ·	areas are to include but are	
**************************************	not limited to: Pre-ordering	
	(telephone number	1
	assignment, installation	1
	scheduling process,	
L	process to provide	

#### **APPENDIX B**

## Overall Performance Index, Credits, and Measurements

The ability for AT&T to provide Local Service branded as AT&T or non-branded pursuant to the explicit requirements and intent of the resale, interconnection, and unbundled element provisions of the Act, FCC orders and Rules, and applicable State Orders and Rulings requires a unique working relationship between AT&T and USWC. In many circumstances, USWC will provide network service and operational support direct to customers on behalf of AT&T in support of end-user service. AT&T and USWC will also be required to interleave processes, personnel, and network components. This requires hand-off of responsibility for parts of processes and network infrastructure, that would normally be under the control of one entity.

This section describes the Performance Index, applicable credits due for lack of performance, and the associated DMOQs and levels of compliance which apply to the Performance Index for purposes of this Agreement. The Parties agree to meet on a regular basis, but no less frequently than quarterly, to discuss whether changes should be made to any of the DMOQs or performance objectives.

Each DMOQ is assigned a Performance Index Rating based on the level of compliance achieved:

<u> </u>	FAILS	APPROACH ES	MEETS	EXCEEDS
Performanc e Rating	-10	-5	0	+5

Each month, a DMOQ Performance Index is calculated from the mean value of all applicable individual DMOQ Performance Ratings for that month. The following examples illustrate the calculation of the DMOQ Performance Index:

Example 1 - There are 30 DMOQs. For the current month,

3 DMOQs are rated Fails

16 DMOQs are rated Approaches

10 DMOQs are rated Meets

1 DMOQ is rated Exceeds

The overall Performance Index for the Month is:

$$(3 \times -10) + (16 \times -5) + (10 \times 0) + (1 \times 5)$$

30

Example 2 - There are 30 DMOQs. For the current month, 0 DMOQs are rated Fails

2 DMOQs are rated Approaches

14 DMOQs are rated Meets

14 DMOQs are rated Exceeds

The overall Performance Index for the Month is:

$$\frac{(0 \times -10) + (2 \times -5) + (14 \times 0) + (14 \times 5)}{30} = +2.0$$

If the DMOQ Performance Index for the last month is a negative number, the overall performance is on average less than the required objective and it is used as a percentage against the last month's total monthly bill to determine the credit due AT&T. For example,

The DMOQ Performance Index calculated for March is -3.5 and the total monthly bill for March is \$95,000. AT&T is due a credit of 3.5% of \$95,000 or \$3,325

If the DMOQ Performance Index for the last month is greater than or equal to 0, the overall performance is on average equal to or greater than the objective and no credit is due AT&T.

# 1. SUMMARY OF PERFORMANCE INDEX DMOQs

#### PRE-ORDER:

Intentionally deleted

#### ORDER/PROVISIONING:

- OP-1 Service Order Installation Interval Visit (Dispatch) Required
- OP-2 Service Order Installation Interval No Visit (Dispatch) Required
- OP-3 Customer Desired/Negotiated Due Date Met
- OP-4 Unbundled Element/Combination Desired Due Date Met
- **OP-5 Installation Appointments Missed**
- **OP-6 Provisioning Commitments Met**
- **OP-7 New Service Trouble**
- **OP-8 Service Order Disconnect Interval**
- **OP-9 Disconnect Commitment Met**
- **OP-10 Intentionally deleted**
- **OP-11 Intentionally deleted**
- OP-12 Notice of Change in Availability of Service Offerings
- **OP-13 Intentionally deleted**
- **OP-14 Intentionally deleted**
- **OP-15 Intentionally deleted**

#### MAINTENANCE/REPAIR:

- MR-1 Time To Restore Out of Service Visit (Dispatch) Required
- MR-2 Time To Restore Out of Service No Visit (Dispatch) Required
- MR-3 Intentionally deleted
- MR-4 Time To Restore Other Service Troubles
- MR-5 Intentionally deleted
- MR-6 Intentionally deleted
- MR-7 Maintenance Appointments Missed
- MR-8 through MR-10 Intentionally deleted
- MR-11 Troubles per 100 Lines
- MR-12 Intentionally deleted
- MR-13 Intentionally deleted

#### **BILLING:**

B-1 through B-3 Intentionally deleted

B-4 Accuracy of Mechanized Bill Format - Wholesale

B-5 Financial Accuracy of Local Other Charges and Credits (OCC) - Wholesale

B-6 through B-8 Intentionally deleted

B-9 Prior Notification of Late Billing - Wholesale

B-10 Comply With Current Version of Standards for Mechanized Billing

B-11 through B-19 Intentionally deleted

## **OPERATOR SERVICES (IF USWC PROVIDED):**

Intentionally Deleted

## **DIRECTORY ASSISTANCE (IF USWC PROVIDED):**

DA-1 Voice DA System Availability
DA-2 through DA-5 Intentionally deleted

## **NETWORK PERFORMANCE:**

Intentionally deleted

# INTERCONNECT/UNBUNDLED ELEMENTS/COMBINATIONS PERFORMANCE:

# 2. Pre-Order DMOQs (Category PO)

Deleted and deferred to compliance filing on DMOQs.

Metric: PO-1 Obtain Service Number

Intentionally deleted.

Metric: PO-2 Obtain Address Verification

Intentionally deleted.

Metric: PO-3 Obtain Service Availability

Intentionally deleted.

Metric: PO-4 Obtain Feature Availability

Intentionally deleted.

Metric: PO-5 Obtain Appointment Schedule

Intentionally deleted.

Metric: PO-6 Obtain Customer Service Record (CSR)

Intentionally deleted.

Metric: PO-7 Pre-Order Information Systems Availability

Intentionally deleted.

Metric: PO-8 Pre-Order Work Center (Single Point of Contact) Availability

# 3. Order/Provisioning DMOQs (Category OP)

Metric: OP-1 Service Order Installation Interval - Visit (Dispatch) Required

	FAILS	APPROACHES	MEETS	EXCEEDS
Visit (Dispatch) Required - 2 days or less	< 90%	>= 90%	>=97%	>=99%

Metric: OP-2 Service Order Installation Interval - No Visit (Dispatch) Required

	FAILS	APPROACHES	MEETS	EXCEEDS
Visit (Dispatch) Not Required - within 2 day (e.g. software	< 90%	>= 90%	>=97%	>=99%
only change)				

Metric: OP-3 Customer Desired/Negotiated Due Date Met

	FAILS	APPROACHES	MEETS	EXCEEDS
% Desired/Negotiated Due Date Met	< 90%	>= 90%	>= 90%	>= 99%

Metric: OP-4 Unbundled Element/Combination Desired Due Date Met

	FAILS	APPROACHES	MEETS	EXCEEDS
% Desired Due				
Date Met	< 90%	>= 90%	>= 97%	>= 99%

The anticipated normal minimum installation interval for Unbundled Elements and specific Combinations follows. Requests for Desired Due Dates less than the following intervals will be considered expedited orders:

Loop Distribution - 2 Days
Loop Concentrator/Multiplexer - 2 Days
Loop Feeder - 2 Days
Local Switching - 2 Days
Operator Systems - 2 Days
Common Transport - 1 Day
Dedicated Transport - DS-0, DS-1/T-1 - 5 Days\*

Dedicated Transport - DS-3/T-3, STS-1 - 5 Days
Dedicated Transport - OC-3 and higher - 15 Days
Signal Transfer Points - 3 Days
Signaling Link Transport - 2 Days
SCPs/Databases (LNP, LIDB, Toll Free, ALI/DMS) - 2 Days
Tandem Switching - 2 Days
Loop Combination - 2 Days
Local Switch Conditioning Combination - 20 Days

Note: Dedicated facilities may require extra time. If AT&T wants higher quality than that which USWC provides to itself, it may request the higher service and pay for it in proportion to the benefit it receives.

Metric:

**OP-5 Installation Appointments Missed** 

	FAILS	APPROACHES	MEETS	EXCEEDS
% Installation	,			
Appointments Missed	> 5%	<= 5%	<= 1%	0%

Metric:

**OP-6 Provisioning Commitments Met** 

FAILS	APPROACHES	MEETS	EXCEEDS
< 90%	>= 90%	>=95%	>=99%

Metric:

**OP-7 New Service Trouble** 

	FAILS	APPROACHES	MEETS	EXCEEDS
Trouble in first 30 Days (POTS/BRI, CENTREX)	> 5%	<=5%	<=9%* <=10%**	<=1%
Trouble in first 60 Days (PRI, Dedicated	> 5%	<=5%	<=9%* <=10%**	<=1%
Service - DS-0, DS-1, DS-3 and Higher)				

<sup>\*</sup> where facilities are available and ICB when facilities are not available.

Trouble in first 60 Days (Unbundled	> 5%	<=5%	<=9%* <=10%**	<=1%
Elements/Comb.)			·	

\*non-designed

\*\*designed

Metric:

**OP-8 Service Order Disconnect Interval** 

	FAILS	APPROACHES	MEETS	EXCEEDS
Visit (Dispatch) Required - 4 days or less	< 90%	>= 90%	>=97%	>=99% ·
Visit (Dispatch) Not Required - within 1 day (e.g. software only change)	< 90%	>= 90%	>=97%	>=99%

Metric:

**OP-9 Disconnect Commitment Met** 

	FAILS	APPROACHES	MEETS	EXCEEDS
% Disconnect				
Commitment Met	< 90%	>= 90%	>=97%	>=99%

Metric:

OP-10 Reject/Jeopardy/Firm Order Confirmation (FOC) Received

Intentionally deleted.

Metric:

**OP-11 Service Order Completion Confirmation (SOCC) Received** 

Intentionally deleted.

Metric:

**OP-12 Notice of Change in Availability of Service Offerings** 

	FAILS	<b>APPROACHES</b>	MEETS -	EXCEEDS
Advance notice of service changes	< 30 days	>= 30 days	>= 45 days	>= 60 days

Metric:

**OP-13 Ordering Systems Availability** 

Intentionally deleted.

Metric:

OP-14 Order/Provisioning Work Center (Single Point of Contact)

**Availability** 

Intentionally deleted.

Metric:

**OP-15 Ordering/Provisioning Expedites & Escalations** 

Intentionally deleted.

# 4. Maintenance/Repair DMOQs(Category MR)

Metric:

MR-1 Time To Restore - Out of Service - Visit (Dispatch) Required

The minimum objective should be to clear ninety-five percent (95%) of out of service reports within twenty-four (24) hours of the time such troubles are reported, in accordance with Minnesota Rules part 7810.5800.

Metric:

MR-2 Time To Restore - Out of Service - No Visit (Dispatch) Required

The minimum objective should be to clear ninety-five percent (95%) of out of service reports within twenty-four (24) hours of the time such troubles are reported, in accordance with Minnesota Rules part 7810.5800.

Metric:

MR-3 Time To Restore - Out of Service - Dedicated Services

Intentionally deleted.

Metric:

MR-4 Time To Restore - All Other Service Troubles

	FAILS	APPROACHES	MEETS	EXCEEDS
24 Hrs or Less	< 85%	>= 85%	>= 95%	>= 99%

Metric:

MR-5 Time To Restore - Network Event

Metric:

MR-6 Mean Time To Repair - Unbundled Element Equipment

Intentionally deleted.

Metric:

MR-7 Maintenance Appointments Missed

	FAILS	APPROACHES	MEETS	EXCEEDS
% Maintenance Appointments Missed	> 5%	<= 5%	>= 8%	0%

Metric:

MR-8 Estimated Time To Restore Met

Intentionally deleted.

Metric:

**MR-9 Timely Status Calls** 

Intentionally deleted.

Metric:

MR-10 Repeat Troubles

Intentionally deleted.

Metric:

MR-11 Troubles per 100 Lines

	FAILS	APPROACHES	MEETS	EXCEEDS
Troubles per				
100 lines	> 5	<= 5	<= 4	<= 2

Metric:

MR-12 Repair Bureau Systems Availability

Intentionally deleted.

Metric:

MR-13 Repair Bureau (Single Point of Contact) Availability

# 4 Billing DMOQs (Category B)

Metric:

B-1 Timeliness of Mechanized Local Bill/CSR Delivery - Wholesale

Intentionally deleted.

Metric:

B-2 Timeliness of Local Service Order Billing - Wholesale

Intentionally deleted.

Metric:

**B-3 Timeliness of Usage Billing - Wholesale** 

Intentionally deleted.

Metric:

B-4 Accuracy of Mechanized Bill/CSR Format - Wholesale

	FAILS	APPROACHES	MEETS	EXCEEDS
Percent of Bills and CSRs that are accurate	< 90%	>= 90%	>= 99.5%	100%

Metric:

B-5 Financial Accuracy of Local Other Charges and Credits (OCC) -

Wholesale

	FAILS	APPROACHES	MEETS	EXCEEDS
Percent Accuracy of OCC Bills	< 95%	>= 95%	>= 98%	>= 99.6%

Metric:

B-6 Timeliness of Correction/Adjustment Dollars - Wholesale

Intentionally deleted.

Metric:

B-7 Bill Period Closure Cycle Time - Wholesale

Intentionally deleted.

Metric:

**B-8 Prior Notification of Late Billing - Wholesale** 

Intentionally deleted.

Metric:

B-9 Comply With Current Version of Standards for Mechanized Billing and CSRs - Wholesale and Usage

	FAILS	APPROACHES	MEETS	EXCEEDS
Billing System software version implementation of current standards	>120 days not on current version	<= 120 days on current version	Current or <= 90 Days not on current version	N/A
Inconsistencies with standards documented in Differences List and delivered prior to effective date	< 90 days prior to effective date	N/A	>= 90 Days prior to effective date	N/A

Metric:

B-10 Months Without File Transfer Failure - Usage Data

			_ oouge Dutu	
	FAILS	APPROACHES	MEETS	EXCEEDS
Transmit files without a failure (consecutive	< 4 months	>= 4 months	>= 6 months	>= 12 months
months)				

Metric:

**B-11 Timeliness of Usage Billing - Usage** 

Intentionally deleted.

Metric:

B-12 Percent Billing Records Delivered Before Day 2 - Usage Data

Intentionally deleted.

Metric:

B-13 Percent Billing Records Delivered - Usage

## Attachment 11

Metric:

**B-14 Percent Call Detail Transmitted Correctly - Usage** 

Intentionally deleted.

Metric:

B-15 Months Without a Rejected Pack - Usage

Intentionally deleted.

Metric:

B-16 Billing Call Detail Accuracy (Severity 1) - Usage

Intentionally deleted.

Metric:

B-17 Billing Call Detail Accuracy (Severity 2) - Usage

Intentionally deleted.

Metric:

**B-18 Billing Inquiry Responsiveness** 

Intentionally deleted.

Metric:

**B-19 Customer Satisfaction** 

Intentionally deleted.

# 5. Operator Services (If USWC Provided) (Category OS)

Metric:

**OS-1 Monthly Average for Seconds of Operator Answer Delay** 

Intentionally deleted.

Metric:

**OS-2 Monthly Total of Quarter Hours of Operator Answer Delay** 

Intentionally deleted.

Metric:

OS-3 Monthly Call Abandonment (hang-up)

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Metric: OS-4 Monthly Call Blockage

# Intentionally deleted.

# 6. Directory Assistance (If USWC Provided) (Category DA)

Metric:

**DA-1 Voice DA System Availability** 

	FAILS	APPROACHES	MEETS	EXCEEDS
Voice System Outages	>= 1 Outage	N/A	No Outage	N/A
Automatic Response Unit Outages	>= 1 Outage	N/A	No Outage	N/A

Metric:

**DA-2 Voice DA Outage/Restoral Notification** 

Intentionally deleted.

Metric:

**DA-3 Voice DA Time To Answer** 

Intentionally deleted.

Metric:

**DA-4 Voice DA Average Work Time** 

Intentionally deleted.

Metric:

**DA-5 Voice DA Abandonment From Queue** 

# 7. Network Performance DMOQs (Category NP)

Metric: NP-1 Switched Service Disruption

Intentionally deleted.

Metric: NP-2 Dedicated Service Disruption

Intentionally deleted.

Metric: NP-3 Network Event

Intentionally deleted.

Metric: NP-4 Blocked Calls

Intentionally deleted.

Metric: NP-5 Blocked Dial Tone

Intentionally deleted.

Metric: NP-6 Post Dial Delay

Intentionally deleted.

Metric: NP-7 Local Loop Availability

Intentionally deleted.

Metric: NP-8 End-to-End Switched Network Availability

# 8. Interconnect/Unbundled Elements & Combinations Performance DMOQs (Category IUE)

Metric:

**IUE-1 Signaling Link Transport Availability** 

Intentionally deleted.

Metric:

IUE-2 Signaling Control Points (SCPs)/Databases availability

Intentionally deleted.

Metric:

IUE-3 Line Information Database (LIDB) Accuracy

Intentionally deleted.

Metric:

IUE-4 Routing to AT&T OS Platform Post Dial Delay (PDD)

Intentionally deleted.

Metric:

IUE-5 Routing to AT&T OS Platform Blocking

Intentionally deleted.

Metric:

**IUE-6 Loop Combination Availability** 

Intentionally deleted.

Metric:

**IUE-7 Dedicated Transport** 

Intentionally deleted.

Metric:

**IUE-8 Common Transport** 

Intentionally deleted.

Metric:

**IUE-9 Switching** 

# Attachment 11

Metric: IUE-10 Collocation

Intentionally deleted.

Metric: IUE-11 Right Of Way

#### **DEFINITIONS**

"Access Services" refers to the all interstate and intrastate switched access and private line transport services offered for the origination and/or termination of interexchange traffic (see FCC Tariff #5 and appropriate state access tariffs).

Access Service Request (ASR) means the industry standard forms and supporting documentation used for ordering Access Services. The ASR will be used to order trunking and facilities between AT&T and USWC for Local Interconnection Service.

"Act" means the Telecommunications Act of 1996.

"Advanced Intelligent Network (AIN)" is a network functionality that permits specific conditions to be programmed into a switch which, when met, directs the switch to suspend call processing and to receive special instructions for further call handling instructions in order to enable carriers to offer advanced features, services and routing.

"AMA" means the Automated Message Accounting structure inherent in switch technology that initially records telecommunication message information. AMA format is contained in the Automated Message Accounting document, published by Bellcore as GR-1100-CORE which defines the industry standard for message recording.

"Applicable Law" shall mean all laws, statutes, common law, regulations, ordinances, codes, rules, guidelines, orders, permits and approvals of any Governmental Authority, including without limitation those relating to the environment, health and safety, which apply or relate to Work Locations or the subject matter of this Agreement.

"Automatic Location Identification/Data Management System (ALI/DMS)" means the emergency services (E911/911) database containing customer location information (including name, address, telephone number, and sometimes special information from the local service provider) used to determine to which Public Safety Answering Point ("PSAP") to route the call.

Automatic Route Selection (ARS)" is a service feature that provides for automatic selection of the least expensive or most appropriate transmission facility for each call based on criteria programmed into the system.

"Basic Exchange Telecommunications Service" means a service offered to end users which provides the end user with a telephonic connection to, and a unique local telephone

number address on, the public switched telecommunications network, and which enables such end user to generally place calls to, or receive calls from, other stations on the public switched telecommunications network. Basic residence and business line services are Basic Exchange Telecommunication Services.

"Bill Period Closure" The process by which AT&T and the LEC jointly agree to close a specific billing period to all further analysis and financial transactions.

"Billing Account Cross Reference (BACR)" Exchanged to convey Meet Point Billing arrangements between LECs and an IXC.

"Billing Account Reference (BAR)" Exchanged to convey Meet Point Billing arrangements between LECs and an IXC.

"BLV/BLI (Busy Line Verify/Busy Line Interrupt) Traffic" or "BLV/BLI Call" means an operator call in which the end user inquires as to the busy status of, or requests an interruption of, a call on an Exchange Service.

"BLV/BLVI Traffic" or "BLV/BLVI Call" refers to an operator call between an AT&T operator and a USWC operator to inquire as to the busy status of, or requesting an interruption of a call on a Basic Exchange Service.

"CABS" means the Carrier Access Billing System which is contained in a document prepared under the direction of the Billing Committee of the OBF. The Carrier Access Billing System document is published by Bellcore in Volumes 1, 1A, 2, 3, 3A, 4 and 5 as Special Reports SR-OPT-001868, SR-OPT-001869, SR-OPT-001871, SR-OPT-001872, SR-OPT-001873, SR-OPT-001874, and SR-OPT-001875, respectively, and contains the recommended guidelines for the billing of access and other connectivity services.

"Calling Party Number" or "CPN" is a Common Channel Signaling parameter which refers to the number transmitted through the network identifying the calling party.

"Central office switch", or "central office" means a switching entity within the public switched communications network, including but not limited to:

"CENTREX" means a Telecommunications Service that uses central office switching equipment for call routing to handle direct dialing of calls, and to provide many private branch exchange-like features.

"CLASS (Custom Local Area Signaling Service) and Custom Features" means a

grouping of optional enhancements to basic local exchange service that offers special call handling features to residential and single-line business customers (e.g., call waiting, call forwarding and automatic redial).

"CLASS' features" are optional end user switched services which include, but are not necessarily limited to: Automatic Call Back; Call Trace; Caller ID and Related Blocking Features; Distinctive Ringing/Call Waiting; Selective Call Forward; Selective Call Rejection. (See Bellcore documentation for definition).

"Collocation" means the right of AT&T to obtain dedicated space in the USWC Local Serving Office (LSO) or other USWC locations and to place equipment in such spaces to interconnect with the USWC network. Collocation also includes USWC providing resources necessary for the operation and economical use of collocated equipment.

"Combinations" ("Combinations") consist of multiple Elements that are logically related to enable AT&T to provide service in a geographic area or to a specific customer.

"Commission" means the Minnesota Public Utilities Commission.

"Common Channel Signaling" or "CCS" means a method of digitally transmitting call set-up and network control data over a special signaling network fully separate from the public voice switched network elements that carry the actual call.

"Common Transport" An interoffice transmission path between ILEC Network Elements which carries the traffic for a variety of carriers.

"Competitive Local Exchange Carrier ("CLEC")" is a facility based interconnector certified to provide its own dial tone through its own local exchange switching office(s). Competitive Local Exchange Carrier will provide some or all of its own network transmission facilities and may purchase certain interconnection service elements from USWC.

"Conduit" means a tube or protected through that may be used to house communication or electrical cables. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more inner ducts.

"Confidential Information" has the meaning set forth in Section 18.1 of the General Terms and Conditions.

"Connect:Direct" The electronic transmission medium formerly known as Network Data Mover (NDM).

- "Contract Year" means a twelve (12) month period during the term of the contract commencing on the Effective Date and each anniversary thereof.
- "Customer Account Record Exchange (CARE)" This refers to customer account data exchanged electronically between a Local Exchange Carrier (USWC) and an Interexchange Carrier (AT&T LD) in order to maintain current, accurate data on the customer's account status.
- "Customer Type Indicator (CTI)" Example: Business, Residence, WATS, Pay Phone, etc.
- "Customer Usage Data" means the local Telecommunications Services usage data of an AT&T Customer, measured in minutes, sub-minute increments, message units, or otherwise, that is recorded by USWC and forwarded to AT&T.
- "Dedicated Transport" An interoffice transmission path between AT&T designated locations. Such locations may include ILEC central offices or the equipment locations, AT&T network components, other carrier network components, or customer premises. Dedicated Transport is used by a single carrier foe the transmission of its traffic.
- "Directory Listings" has the meaning set forth in Section 20.1 of Attachment I.
- "Discloser" means that party to this Agreement which has disclosed Confidential Information to the other party.
- "DS1" is a digital signal rate of 1.544 Mbps (Mega Bits Per Second).
- "DS3" is a digital signal rate of 44.736 Mbps.
- "E911 Service" is a method of routing 911 calls to a PSAP that uses customer location data in the ALI/DMS to determine the PSAP to which a call should be routed.
- "Effective Date" is the date indicated in the Preface on which the Agreement shall become effective.
- "EMR" means the Exchange Message Record System used among RLECs for exchanging telecommunications message information for billable, non-billable, sample, settlement and study data. EMR format is contained in BR-010-200-010 CRIS Exchange Message Record, published by Bellcore and which defines the industry standard for exchange message records.

"End office switches" which are Class 5 switches from which end user Exchange Services are directly connected and offered.

"Enhanced Services" means any for-profit telecommunications service that adds value to users' information during the course of transmission.

"Enhanced White Pages" means optional features available for White Pages Directory listings (e.g., bold, all capitals, additional line of text, indented).

"Enhanced Yellow Pages" means optional features available for Yellow Pages Directory listings (e.g., red type, bold, all capitals, additional line of text, indented).

"Environmental Hazard" means any substance the presence, use, transport, abandonment or disposal of which (1) requires investigation, remediation, compensation, fine or penalty under any Applicable Law (including, without limitation, the Comprehensive Environmental Response Compensation and Liability Act, Superfund Amendment and Reauthorization Act, Resource Conservation Recovery Act, the Occupational Safety and Health Act and provisions with similar purposes in applicable foreign, state and local jurisdictions) or (ii) poses risks to human health, safety or the environment (including, without limitation, indoor, outdoor or orbital space environments) and is regulated under any Applicable Law.

"Exchange Message Record (EMR)" This is an industry standard format used among LECs for exchanging message information for billable, nonbillable, sample, settlement and study data.

"Exchange Message Record" or "EMR" is the standard used for exchange of telecommunications message information telecommunications providers for billable, non-billable, sample, settlement and study data.

"Expanded Interconnection Collocation" or "EIC" is the virtual collocation service which USWC provides in its designated USWC wire centers, and shall have the same meaning as set forth in U S WEST's FCC No. 5 Tariff.

"FCC" means Federal Communications Commission.

"Governmental Authority" means any federal, state, local, foreign or international court, government, department, commission, board, bureau, agency, official, or other regulatory, administrative, legislative or judicial authority with jurisdiction.

"Interconnection" means the connection of separate pieces of equipment, transmission facilities, etc., between the local exchange networks of the parties to this Agreement. The architecture of interconnection may include, but is not limited to several methods such as virtual collocation, entrance facilities and meet point arrangements.

"Interexchange Carrier" or "IXC" means a provider of interexchange telecommunications services as recognized by state or federal regulatory agencies.

"Interim Number Portability" or "Service Provider Number Portability" as referenced in this Agreement, is the capability of an end user to retain its telephone number when changing local service providers, using existing switched based technology.

"Interim Number Portability (INP)" means the delivery of LNP capabilities, from a customer standpoint in terms of call completion, with as little impairment of functioning, quality, reliability, and convenience as possible and from a carrier standpoint in terms of compensation, through the use of existing and available call routing, forwarding, and addressing capabilities.

"Line Information Data Base(s) (LIDB)" means one or all, as the context may require, of the Line Information Databases owned individually by ILECs and other entities which provide, among other things, calling card validation functionality for telephone line number cards issued by ILECs and other entities. A LIDB also contains validation data for collect and third number-billed calls, which include billed number screening.

"Local Account Maintenance (LAM)" This refers to customer account data exchanged electronically between the Switch Provider (SWP) and the Local Service Provider (LSP).

"Local Number Portability (LNP)" means the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another.

"Local Resale Data Transfer Requirements (LRDTR)" This document contains guidelines for transmission of Local Service Provider's recorded, unrated usage to AT&T.

"Local Service" has the meaning set forth in Section 35 of Part 2.

"AT&T" has the meaning set forth in the preamble.

"AT&T Customer" means any business or residential customer for AT&T services.

"MECAB" refers to the Multiple Exchange Carrier Access Billing (MECAB) document prepared by the Billing Committee of the Ordering and Billing Forum (OBF), which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECAB document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of an access service provided by two or more LECs (including a LEC and a CLEC), or by one LEC in two or more states within a single LATA.

"MECAB" means the Multiple Exchange Carrier Access Billing document prepared under the direction the Billing Committee of the OBF. The Multiple Exchange Carrier Access Billing document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of access and other connectivity services provided by two or more LECs (including LECs and CLECs), or by one LEC or CLEC in two or more states within a single LATA.

"MECOD" refers to the Multiple Exchange Carriers Ordering and Design (MECOD) Guidelines for Access Services - Industry Support Interface, a document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum (OBF), which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECOD document, published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for access service which is to be provided by two or more LECs (including a LEC and a CLEC). It is published by Bellcore as SRBDS 00983.

"MECOD" means the Multiple Exchange Carriers Ordering and Design (MECOD) Guidelines for Access Services- Industry Support Interface, a document developed under the auspices of the Billing Committee of the OBF. The MECOD document, published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for access and other connectivity services which is to be provided by two or more LECs (including LECs and CLECs), or by one LEC or CLEC in two or more states within a single LATA.

"Meet-Point Billing" or "MPB" refers to an agreement whereby two LECs (including a LEC and a CLEC) jointly provide the entrance facility transport element of a switched access service to an Interexchange Carrier, with each LEC (or CLEC) receiving an appropriate share of the transport element revenues as defined by their effective access tariffs.

"NANP" means the "North American Numbering Plan", the system of telephone numbering employed in the United States, Canada, and certain Caribbean countries. It denotes the three digit Numbering Plan Area code and a seven digit telephone number made up of a three digit Central Office code plus a four digit station number.

"Network Data Mover (NDM)" currently referred to as Connect:Direct

"Network Element" means a facility or equipment used in the provision of a telecommunications service. Network Element includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.

"Numbering Plan Area" or "NPA" is sometimes referred to as an area code. This is the three digit indicator which is defined by the "A", "B", and "C" digits of each 10-digit telephone number within the North American Numbering Plan ("NANP"). Each NPA contains 872 possible NXX Codes. There are two general categories of NPA, "Geographic NPAs" and "Non-Geographic NPAs". A "Geographic NPA" is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that Geographic area. A "Non-Geographic NPA", also known as a "Service Access Code" (SAC Code) is typically associated with a specialized telecommunications service which may be provided across multiple geographic NPA areas.

"NXX", "NXX Code", or "Central Office Code" is the three digit switch entity indicator which is defined by the "D", "E", and "F" digits of a 10 digit telephone number within the North American Numbering Plan ("NANP").

"911 Service" means a universal telephone number which gives the public direct access to the PSAP. Basic 911 service collects 911 calls from one or more local exchange switches that serve a geographic area. The calls are then sent to the correct authority designated to receive such calls.

"OBF" means the Ordering and Billing Forum (OBF), which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS).

"Parties" means AT&T and USWC

"Permanent Number Portability (PNP)" means the use of the Local Routing Number

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(LRN) database solution to provide fully transparent LNP for all customers and all providers without limitation.

"Point of Interface" or "POI" is a mutually agreed upon point of demarcation where the exchange of traffic between two ECs (including a LEC and a CLEC) takes place.

"Pole Attachment" means the connection of a facility to a utility pole. Some examples of facilities are mechanical hardware, grounding and transmission cable, and equipment boxes.

"Public Safety Answering Point (PSAP)" means the designated agency to which calls to E911/911 services are routed.

"Rate Center" means the specific geographic point and corresponding geographic area which are associated with one or more particular NPA-NXX codes which have been assigned to a LEC (or CLEC) for its provision of Basic Exchange Telecommunications Services. The "rate center point" is the finite geographic point identified by a specific V&H coordinate, which is used to measure distance-sensitive end user traffic to/from the particular NPA-NXX designations associated with the specific Rate Center. The "rate center area" is the exclusive geographic area identified as the area within which the LEC (or CLEC) will provide Basic Exchange Telecommunications Services bearing the particular NPA-NXX designations associated with the specific Rate Center. The Rate Center point must be located solely within the Rate Center area.

"Real Time" means the actual time in which an event takes place, with the reporting on or the recording of the event practically simultaneous with its occurrence.

"Recipient" means that party to this Agreement to which Confidential Information has been disclosed by the other party.

"Recorded Usage Data" has the meaning set forth in Attachment 7.

"Release" means any release, spill, emission, leaking, pumping, injection, deposit, disposal, discharge, dispersal, leaching, or migration, including without limitation, the movement of Environmental Hazards through or in the air, soil, surface water or groundwater, or any action or omission that causes Environmental Hazards to spread or become more toxic or more expensive to investigate or remedial.

"Reseller" is a category of Local Exchange service providers who obtain dial tone and associated telecommunications services from another provider through the purchase of

unbundled finished services for resale to their end use customers.

"Right of Way (ROW)" means the right to use the land or other property of another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and may include the right to use discrete space in buildings, building complexes or other locations.

"RLEC" has the meaning set forth in the preface. The terms Local Exchange Company ("LEC"), Incumbent Local Exchange ("ILEC") and RLEC are used interchangeably throughout this Agreement and shall have the same meaning.

"Routing Point" means a location which a LEC or CLEC has designated on its own network as the homing (routing) point for traffic inbound to Basic Exchange Services provided by the LEC or CLEC which bear a certain NPA-NXX designation. The Routing Point is employed to calculate mileage measurements for the distance-sensitive transport element charges of Switched Access Services. The Routing Point may be an "End Office" location, or a "LEC Consortium Point of Interconnection". Pursuant to that same Bellcore Practice, examples of the latter shall be designated by a common language location identifier (CLLI) code with (x)KD in positions 9, 10, 11, where (x) may be any alphanumeric A-Z or 0-9. The above referenced Bellcore document refers to the Routing Point as the Rating Point. The Rating Point/Routing Point need not be the same as the Rate Center Point, nor must it be located within the Rate Center Area, but must be in the same LATA as the NPA-NXX.

"SECAB" means the Small Exchange Carrier Access Billing document prepared by the Billing Committee of the OBF. The Small Exchange Carrier Access Billing document, published by Bellcore as Special Report SR OPT - 001856, contains the recommended guidelines for the billing of access and other connectivity services.

"Served Premises" means collectively, the AT&T designated locations to which AT&T orders Network Elements, Ancillary Functions or Combinations.

"Standard AT&T Billing Requirements (SABR)" This document contains AT&T's standard billing principles and requirements for LECs to utilize when billing AT&T Local.

"Supplier Quality Certification" means the process by which AT&T or an outside consulting firm reviews, evaluates procedures, controls, measurements and documentation of the LEC related to provisioning and billing. This process ensures that the LEC's processes are performing and producing output reports according to AT&T's requirements.

"Tandem office switches" are Class 4 switches used to connect and switch trunk circuits between and among to end office switches and other tandems.

"Tariff Services" as used throughout this Agreement refers to USWC interstate tariffs and state tariffs, price lists and price schedules and catalogs.

"Telecommunications Services" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used. As used is this definition, "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

"Telephone Relay Service" has the meaning set forth in Section 6.7 of Attachment 2.

"Thousands Block of Numbers" shall mean 1000 or more consecutive numbers beginning and ending on a digit boundary, e.g., 949-1000 to 949-1999.

"Voluntary Federal Customer Financial Assistance Programs" are Telecommunications Services provided to low-income subscribers, pursuant to requirements established by the appropriate state regulatory body.

"Waste" means all hazardous and non-hazardous substances and materials which are intended to be discarded, scrapped, or recycled, associated with activities AT&T or LEC or their respective contractors or agents perform at Work Locations. It shall be presumed that all substances or materials associated with such activities, that are not in use or incorporated into structures (including without limitation damaged components or tools, leftovers, containers, garbage, scrap, residues or byproducts), except for substances and materials that AT&T, LEC or their respective contractors or agents intend to use in their original form in connection with similar activities, are Waste. "Waste" shall not include substances, materials or components incorporated into structures (such as cable routes) even after such components or structure are no longer in current use.

"Wire Center" denotes a building or space within a building which serves as an aggregation point on a given carrier's network, where transmission facilities and circuits are connected or switched. Wire center can also denote a building in which one or more central offices, used for the provision of Basic Exchange Services and access services, are located.

"Work Locations" means any real estate that LEC owns, leases or licenses or in which

it holds easements or other rights to use, or does use, in connection with this Agreement.

ACRONYM	DEFINITION	
AAA	American Arbitration Association	
ADM	Add Drop Multiplexer	
AIN	Advanced Intelligent Network	
ALEC	Alternative Local Exchange Carrier	
ALI/DMS	Automatic Location Identification/ Data Management Systems	
AMA	Automated Message Accounting	
ANI	Automatic Number Identification	
ANSI	American National Standards Institute	
ARPM	Average Revenue Per Message	
ARS	Automatic Route Selection	
ASR	Access Service Request	
AT	Access Tandem	
ATIS	Alliance for Telecom Industry Solutions	
ATM	Asynchronous Transfer Mode	
BACR	Billing Account Cross Reference	
BAN	Billing Account Number	
BAR	Billing Account Reference	
BICI	Broadband Inter -Carrier Interface	
BITS	Building Integrated Timing Supply	
BLI	Busy Line Interrupt	
BLV	Busy Line Verification	
BLVI	Busy Line Verification Interrupt	
BNA	Billing Name and Address	
BOS	Billing Output Specification	
BRCS	Business and Residential Customer Service	
BRI	Basic Rate Interface	
CABS	Carrier Access Billing Systems	
CALEA	Communications Assistance Law Enforcement Act	
CAMA	Centralized Automatic Message Accounting	
CAP	Competitive Access Provider	

CCITT	Consultative Committee on International Telephone & Telegraph	
CARE	Customer Account Record Exchange	
ccs	Communications Channel Signaling	
ccs	100 Call Seconds	
CFA	Circuit Facility Assignment	
CIC	Carrier Identification Code	
CLASS®	Custom Local Area Signaling Service	
CLEC	Competitive Local Exchange Carrier	
CLLI	Common Language Location Identifier	
CMIP	Coded Mark Inversion Protocol .	
CO	Central Office	
COT	Central Office Terminal	
CPE	Customer Premise Equipment	
CPN	Calling Party Number	
CRDD	Customer Requested Due Date	
CTC	Customer Transfer Charge	
CTI	Customer Type Indicator	
CY	Current Year	
DA	Directory Assistance	
DB	Data Base	
DCC	Data Communications Channel	
DCLU	Digital Carrier Line Unit	
DCS	Digital Cross Connect System (electronic)	
DF	Distributing Frame	
DID	Direct Inward Dial	
DLC	Digital Loop Carrier	
DLTU	Digital Line Trunk Unit	
DMOQ	Direct Measure of Quality	
DN	Directory Number	
DNU/S	Digital Network Unit SONET	
DS-0	Digital Signal Level Zero	
DS-1	Digital Signal Level One	

DS-3	Digital Signal Level Three	
DSX	Digital Cross Connect	
DT	Dial Tone	
DTMF	Dual-Tone Multi Frequency	
DTT	Direct Trunk Transport	
E&M	Ear & Mouth Signaling	
EAS	Extended Area Service	
EBCDIC	Extended Binary-Coded Decimal Interexchange Code	
EBI	Electronic Bonding Interface	
EFT	Electronic Fund Transfer	
EIC	Expanded Interconnection Collocation	
EMR	Exchange Message Record	
EO	End Office	
ESF	Extended Super Frame	
ESL	Essential Service Line	
ETTR	Estimated Time to Restore	
EUCL	End User Common Line Charge	
FDI	Feeder Distribution Interface	
FDP	Fiber Distribution Panel	
FOC	Firm Order Commitment	
GTT	Global Title Translation	
HDT	Host Digital Terminal	
HFC	Hybrid Fiber Coax	
HNPA	Home Numbering Plan Area	
IDCU	Integrated Digital Carrier Unit	
IDLC	Integrated Digital Loop Carrier	
IEEE	Institute of Electrical and Electronic Engineers	
ILEC	Incumbent Local Exchange Carrier	
INA	Integrated Network Access	
INP	Interim Number Portability	
INDS	Integrated Services Digital Network	
ISNI	Intermediate Signal Network Identifier	
10141	I wermediate Signal Network Identifier	

ISO	International Standardization Organization		
ISLU	Integrated Services Line Unit		
ITU	International Telecommunications Union		
IXC	Interexchange Carrier		
LASS	Local Area Signaling Services		
LAM	Local Account Maintenance		
LATA	Local Access Transport Area		
LCC	Line Class Code		
LD	Long Distance		
LDTR	Local Resale Data Transfer Requirements		
LEC	Local Exchange Carrier		
LERG	Local Exchange Routing Guide		
LGX®	Lightguide Cross Connect		
LIDB	Line Information Data Base		
LNP	Local Number Portability		
LOA	Letter of Authorization ( Agency)		
LRN	Location Routing Number		
LSO	Local Switching Office (Central Office)		
LSP	Local Service Provider		
LSSGR	LATA Switching Systems Generic Requirements		
LU	Line Unit		
MDF	Main Distributing Frame		
MDU	Multiple Dwelling Unit		
MECAB	Multiple Exchange Carrier Access Billing		
MECOD	Multiple Exchange Carrier Ordering and Design		
MF	Multi-Frequency		
MIB	Management Information Base		
MLT	Mechanized Loop Tests		
МОР	Methods of Procedure		
MPB	Meet Point Billing		
MR	Modification Request		
MRVT	MTP Routing Verification Test		

MSAG	Master Street & Address Guide		
MPT	Message Transfer Port		
MTTR	Mean Time to Repair		
NANP	North American Numbering Plan		
NDM	Network Data Mover		
NEBS	Network Equipment Building System		
NECA	National Exchange Carrier Association		
NI	Network Interface		
NID	Network Interface Device		
NIU	Network Interface Unit		
NMS	Network Management System .		
NPA	Numbering Plan Area		
NVT	Network Validation Test		
O&M	Operations & Maintenance		
OAM&P	Operations, Administration, Maintenance & Provisioning		
OBF	Ordering & Billing Forum		
OC1	Optical Carrier 1 (672 channels 51.84 Mb/s)		
OC3	Optical Carrier 3 (2016 Channels, 155.52 Mb/s)		
OC12	Optical Carrier 12 (8064 Channel, 622.08 Mb/s)		
OC48	Optical Carrier 48 (32256 Channels 2.488 Gb/s)		
OC96	Optical Carrier 96 (64512 Channels 4.976 Gb/s)		
OCN	Operating Company Number		
OLI	Originating Line Indicator		
OMAP	Operations, Maintenance & Administration Part		
OPRSVC	Operator Services		
ORT	Operations Readiness Test		
OSS	Operations Support Systems		
OSSGR	Operator Services Systems Generic Requirements		
OUTPLOC	Change of Primary Local Operating Carrier		
PBX	Private Branch Exchange		
PDH	Pleisochronous Digital Hierarchy		
PIC	Primary Interexchange Carrier		

PLOC	Primary Local Operating Carrier
PNP	Permanent Number Portability
POI	Point of Interface
POT	Point of Termination
POTS	Plain Old Telephone Service
PRI	Primary Rate Interface
PSAP	Public Safety Answering Point
PUC	Public Utilities Commission
RAO	Regional Accounting Office
RCF	Remote Call Forwarding
RI	Route Index .
RLEC	Regional Local Exchange Carrier
ROW	Right of Way
RSM	Remote Switch Module
RT	Remote Terminal
SABR	Standard AT&T Billing Requirements
SAG	Street Address Guide
SAI	Serving Area Interface
SCCP	Signaling Connection Control Point
SCE	Service Creation Environment
SCP	Service Control Points
SDH	Synchronous Digital Hierarchy
SMDI-E	Standard Message Desk Interface- Enhanced
SMS	Service Management System
SNMP	Simple Network Management Protocol
SONET	Synchronous Optical Network
SPC	Stored Program Control
SPNP	Service Provider Number Portability Service
SPOC	Single Point of Contact
SPOI	Signaling Point of Interconnection
SRVT	SCCP Routing Verification Test
SS7	Signaling System 7

SSP	Signaling Switching Point		
STP	Signaling Transfer Point		
STS	SONET Transport Signal		
SWF-DS1	Switched Functional DS1 Service Capability		
SWP	Switch Provider		
TA	Technical Advisory		
T&M	Time & Materials		
TCAP	Transaction Capabilities Application Port		
TIA/EIA	Telecommunications Industries Association/ Electronic Industries Association		
TR	Technical Requirements .		
TRCO	Trouble Reporting Control Office		
TSGR	Transport System Generic Requirements		
TSLRIC	Total Service Long Run Incremental Cost		
TSI	Time Slot Interchanger		
TSP	Telecommunications Services Priority		
TST	Tandem Switched Transport		
TU	Trunk Unit		
UDLC	Universal Digital Loop Carrier		
VCI	Virtual Channel Identifier		
VF	Voice Frequency		
VMS	Voice Messaging Service		
VΤ	Virtual Tributary		
WDM	Wavelength Division Multiplexing		

## SCHEDULE 1 TARIFFS SUBJECT TO WHOLESALE DISCOUNT OF 21.5% MINNESOTA

Rates are interim and subject to true up based on further Commission proceedings.

US WEST Communications Exchange & Network Services Tariff	Application and Reference     All subsections	
	General Regulations     All subsections	
	Service Charges     All subsections	
	Construction Charges & Other Special Charges     All subsections	•
	5. Exchange Services All subsections	
	105. Obsolete Exchange Services All subsections	
	6. Message Telecommunication Services All subsections	
	7. Wide Area Telecommunication Service All subsections	
	8. Connections of Premises Equipment To Telecommunications Services All subsections	
	9. Central Office Services All subsections	
	109. Obsolete Central Office Services All subsections	
	10. Misc. Service Offerings All subsections	
	110. Obsolete Misc. Service Offerings All subsections	

		1	 	
11.	Pole Attachments	}		
	All subsections	1		

#### SCHEDULE 1 TARIFFS SUBJECT TO WHOLESALE DISCOUNT OF 21.5% MINNESOTA

US WEST Communications Exchange & Network Services Tariff (continued)	12. Open Network Architecture (ONA) Services Note: The (ONA) Service tariff section references other tariffs and sections which are listed in this exhibit. Wholesale discounts for referenced tariffed services apply to ONA.	13. Reserved
	14. Integrated Services Digital Network All subsections	
	15. Miscellaneous Switched Digital Services All subsections	
	20. Facilities for Radio Carriers All subsections	16 19. Reserved
	25. Customized Services All subsections	21 24. Reserved
	125. Obsolete Customized Services All subsections	
US WEST Communications Private Line Transport Services Tariff	Entire tariff, sections 1. through 6.	
US WEST Communications Competitive Advanced Communications Services Tariff	Entire tariff, sections 1. through 6,	
US WEST Communications Competitive Private Line Transport Services Tariff	Entire tariff, sections 1. through 6.	
US WEST Communications Competitive Exchange and Network Services Tariff	Entire tariff	

Other Retail Services Deregulated	All retail service provided by US West	
Other Retail Service Unregulated	All retail services provided by US West	
Other Retail Services Detariffed	All retail services provided by US West	

#### SCHEDULE2

#### NETWORK ELEMENT PRICES FOR MINNESOTA

Rates are interim and subject to true up based on further Commission proceedings.

Network Element	Price <sup>1</sup> (Unbundled Network Elements)	Price (Packaging & Resale)
Network Interface Device	\$0.45 per line per month	
Loop Distribution	\$6.89 per line per month	
Loop Concentrator/Multiplexer	\$1.93 per line per month	•
Loop Feeder	\$2.76 per line per month	
Aggregated Loop (Distribution + Concentrator/multiplexer + Feeder)	\$11.58 per line per month <sup>2</sup>	tion general to
Local Switching (LEC switch): Port <sup>3</sup> Usage	\$1.49 per line per month \$0.00260 per minute	
Operator Systems/Directory Assistance	N/A	t. A. Philip
Dedicated Transport	\$4.57 per DSO per month	
Common Transport	\$0.00236 per minute	
Tandem Switching	\$0.0032 per minute	

<sup>&</sup>lt;sup>1</sup> Prices include non-recurring charges.

<sup>&</sup>lt;sup>2</sup> The Aggregated Loop Price of \$11.58 plus the price of the NID of \$0.45 equals a total loop price of \$12.03.

<sup>&</sup>lt;sup>3</sup> All switch features including Custom and CLASS.

Signaling Links	\$79.37 per link per month	
Service Control Points/Databases	\$0.001 per message	
Dark Fiber	\$22.00 per pair per mile	
Interim Number Portability		New York State Method
Resale Customer Transfer Charge		\$5.00
Local Call Termination	Symmetrical Rates	
Operational Interfaces: Gateway Utilization	Each Party pays own cost TSLRIC per order	•

<sup>&</sup>lt;sup>4</sup> Costs need to be developed after operational interface designed.

Virtual & Physical Collocation: Entrance Enclosure:		
Manhole Handhold	\$27.61 per month per manhole \$15.22 per month per handhold	
Conduit and Interduct from Entrance Enclosure to	\$0.42 per foot per month	
Cable		
Vault		
Core Drill	\$363.13 per core	
	\$0.47 per foot per month	
Riser from Cable Vault to	do. 47 por 1001 por month,	
Customer Designated equipment		
	\$0.05 per foot per month	
Fiber Optic Cable		
(24 fiber increments)		
	\$417.43 per setup	
Fiber Cable Splicing	\$17.40 per fiber per splice	
<b>-</b>	\$1.66 per foot	
Fiber Cable Placement in conduit and riser		
Copper Cable per 25 pair	\$0.012 per month	
	\$91.27 per splice	
Copper Cable Splicing		
Copper Cable Placement in	\$1.66 per foot	
Condiut and Riser	\$0.20 per foot per month	
Coax Cable RG59	Tame has soot her morning	•

48 Volt DC Power	\$7.52 per ampere per month	
48 Volt DC Power Cable installation A and B Feeder Pair from Power Source to leased physical space:		
20 amp feed	\$0.28 per foot per feed per month and \$50.00 per installation	
40 amp feed	\$0.38 per foot per feed per month and \$68.81 per installation	
60 amp feed	\$0.48 per foot per feed per month and \$86.42 per installation	
AC Power per Watt	\$0.06 per month	
Humidification per leased physical space	\$56.45 per month	
Rack Space Per Shelf	\$5.61 per month	
Labor Charges:		
Equipment Maintenance per ½ hour per technician	\$20.48-Normal Business Hours \$31.33-Out of Normal Business Hours	
Virtual Training per ½ hour	\$23.98-Normal Business Hours	
Equipment Installation, Change, Removal-per ½ hour per technician	\$20.48-Normal Business Hours \$31.33-Out of Normal Business Hours	
Engineering Installation, Change, Removal per ½ hour per technician	\$25.79-Normal Business Hours \$39.30-Out of Normal Business Hours	
Inspector Labor per ½ hour per technician	\$22.00-Normal Business Hours \$37.41-Out of Normal Business Hours	
Physical Collocation:	and the second s	an a san a paratu an mangi merengan pangkan pangkan pangkan pangkan pangkan pangkan pangkan pangkan pangkan pa
Wire Cage Enclosure, 4 Walls, 8 ft. High w/Central HVAC:		
		i i

101 - 200 sq. ft.	\$225.00 per month		
201 - 300 sq. ft.	\$265.00 per month	Marianta	
301 - 400 sq. ft.	\$305.00 per month	, ,	
Wire Cage Enclosure, 4 Walls, 8 ft. High w/Standalone HVAC:			
0 - 100 sq. ft.	#355.00 per month		
101 - 200 sq. ft.	\$445.00 per month		
201 - 300 sq. ft.	\$550.00 per month		
301 - 400 sq. ft.	\$600.00 per month		
Wire Cage Enclosure, 4 Walls, 15 ft. High w/Central HVAC:			•
0 - 100 sq. ft.	\$255.00 per month	•	
101 - 200 sq. ft.	\$315.00 per month		· · · · · · · · · · · · · · · · · · ·
201 - 300 sq. ft.	\$365.00 per month		
301 - 400 sq. ft.	\$415.00 per month		
Wire Cage Enclosure, 4 Walls, 15 ft. High w/Standalone HVAC:			
0 - 100 sq. ft.	\$385.00 per month		
101 - 200 sq. ft.	\$495.00 per month		
201 - 300 sq. ft.	\$600.00 per month		
301 - 400 sq. ft.	\$655.00 per month		

#### Physical and Virtual Collocation Prices

#### **MINNESOTA**

Rates are interim and subject to true up based on further Commission proceedings.

			PROXY PRICE
Comm	on Elements		
Commi	Quote Preparation Fee		\$1,684.80
	2-wire DSO EICT - Recurring		\$4.02
	2-wire DSO EICT - Non-Recurring		\$467.44
	4-wire DSO EICT - Recurring		\$4.02
:	4-wire DSO EICT - Non-Recurring		\$467.44
	DS1 EICT - Recurring		\$17.22
	DS1 EICT - Non-Recurring		\$313.25
	DS3 EICT - Recurring		\$52.50
	DS3 EICT - Non-Recurring		\$329.00
	Entrance Facility		
	2-Fiber - Recurring		\$1.97
	2-Fiber - Non-Recurring		\$1,444.80
	Cable Splicing		
	Per Fiber		\$19.25
	Per Setup		\$457.80
	Engineering per ½ Hour - Regular		\$23.73
gipunga sin	Engineering per 1/2 Hour - After Hours	The second se	\$36.16
	Installation per 1/2 Hour - Regular		\$27.50
c:\minn.	fin\collocationprices\ldc		4/05/97

Installation per 1/2 Hour - After Hours	\$41.22
Maintenance per ½ Hour - Regular	\$20.48
Maintenance per ½ Hour - After Hours Inspector per ½ Hour - Regular	\$31.33 \$22.00
Inspector per 1/2 Hour - After Hours	\$37.41
Equipment Bay, Per Shelf	\$10.75
Training per ½ Hour	\$23.98
48 Volt Power, per ampere, per month	\$10.40
48 Volt Power Cable	
20 Ampere Capacity - Recurring	\$4.66
20 Ampere Capacity - Non-Recurring	\$3,167.21
40 Ampere Capacity - Recurring	\$6.42
40 Ampere Capacity - Non-Recurring	\$4,359.71
60 Ampere Capacity - Recurring	\$8.06
60 Ampere Capacity - Non-Recurring	<b>\$</b> 5.475.62

# FIRST AMENDMENT TO AGREEMENT FOR LOCAL WIRELINE NETWORK INTERCONNECTION AND SERVICE RESALE BETWEEN AT&T COMMUNICATIONS OF THE MIDWEST, INC. AND US WEST COMMUNICATIONS, INC.

"Agreement"), the Parties hereby amend the Agr	Inc. ("AT&T") and U S WEST Communications, ublic Utilities Commission on March 17, 1997 (the
1998 as follows:	
<ol> <li>Section 1.1 of Part A of the Agreement the following:</li> </ol>	is hereby deleted and replaced in its entirety with
Agreement shall become effective as Commission under 47 U.S.C. § 252(e)(	d representatives of USWC and AT&T, this of March 17, 1997, the date ordered by the (1) (the "Effective Date"), and shall expire March ve Date, unless renewed by AT&T or terminated of this Agreement.
IN WITNESS WHEREOF, the Parties hereto haby their respective duly authorized representative	ave caused this First Amendment to be executed es.
AT&T Communications of the Midwest, Inc.	U S WEST Communications, Inc.
	· ·
Signature	Signature
Richard E. Thayer	
Name Printed/Typed	Name Printed/Typed
Title	Title

Date

Date

Qwest Corporation Law Department 200 South Fifth Street, Room 395 Minneapolis, MN 55402 (612) 672-8905-Phone (612) 672-8911-Fax

Qwest. 2

Jason D. Topp Attorney

November 14, 2000

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Re:

In the Matter of the Joint Application for Approval of the Second Amendment to Interconnection Agreement between AT&T Corp. and Qwest Corporation

Dear Dr. Haar:

Enclosed for filing with the Minnesota Public Utilities Commission are an original and fifteen (15) copies of the above referenced amendment to the interconnection agreement. The original interconnection agreement was approved by the Minnesota Public Utilities Commission on March 17, 1997 in Docket No. P-442, 421/M-96-855. This second amendment adds certain terms, conditions and rates for Local Number Portability Managed Cuts.

If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

very truly yours

Jeson Topp

Attachment

Cc: Attached Service List



#### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott Edward A. Garvey Joel Jacobs Marshall Johnson LeRoy Koppendrayer

Chair Commissioner

Commissioner Commissioner Commissioner

Re:

In the Matter of the Joint Application for Approval of the Second Amendment to Interconnection Agreement between AT&T Corp. and

**Qwest Corporation** 

#### AFFIDAVIT OF SERVICE

STATE OF MINNESOTA ) ss COUNTY OF HENNEPIN

Duane Scherr, being first duly sworn, deposes and says:

That on the 14th day of November, 2000, at the City of Minneapolis, State of Minnesota, he served the annexed filing on the party designated therein, by either delivery in person or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing same in the post office at Minneapolis, Minnesota, directed to said address or last known address.

Subscribed and sworn to me this 14th day of November, 2000.

Lune then



#### st Service List

Linda Chavez Minnesota Department of Commerce 121 7th Place East, Suite 200 St. Paul, MN 55101

Owest Corporation
Director - Interconnection Compliance
1801 California Street, Room 2410
Denver, CO 80202-1984

C st Corporation
A...: Jim Gallegos
Corporate Counsel, Interconnection
1801 California Street, 38th Floor
Denver, CO 80202

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Jason Topp-Qwest Corporation 200 South Fifth Street, Room 395 Minneapolis, MN 55402

Christine Schwartz AT&T ICA Negotiations Manager AT&T 1875 Lawrence St., Room 10-74 Denver, CO 80202

## Amendment No. 2 to the Interconnection Agreement Between AT&T Corp. and

### Qwest Corporation (formerly doing business as U S WEST Communications, Inc.)

This Amendment No. 2 ("Amendment") is made and entered into by and between AT&T Corp. ("AT&T") and Qwest Corporation (formerly doing business as U S WEST Communications, Inc.) ("Qwest").

#### **RECITALS**

WHEREAS, AT&T and Qwest entered into an Interconnection Agreement for service in the state of Minnesota that was approved by the Minnesota Public Utilities Commission on March 14, 1997 (the "Agreement"); and

WHEREAS, AT&T and Qwest desire to amend the Agreement under terms and conditions contained herein.

#### **AGREEMENT**

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

#### 1. Amendment Terms.

This Amendment is made in order to add the terms, conditions and rates for Local Number Portability Managed Cuts as set forth in the Attachment for Local Number Portability Managed Cuts, attached hereto and incorporated herein.

#### 2. Effective Date.

This Amendment shall be deemed effective upon approval by the appropriate state Commission; however, the Parties may agree to implement the provisions of this Amendment upon execution.

#### 3. Further Amendments.

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by written instrument executed by an authorized representative of both Parties.

#### 4. No Waiver.

The Parties understand that the provisioning of Local Number Portability Managed Cuts may be considered as part of an ongoing inquiry into Qwest's applications to provide in-region interLATA service pursuant to Section 271 of the Telecommunications Act of 1996 (the "Act"), may be measured as part of an ancillary inquiry into performance measurement before the Qwest Regional Oversight Committee ("ROC") and will be a topic of discussion in renegotiations and, if necessary, arbitration of interconnection agreements pursuant to Section 252 of the Act. All Parties enter into this Amendment without prejudice to or waiver of any of its rights to challenge the terms and conditions of this Amendment under the Agreement, the Act, FCC or state commission rules, ROC determinations or recommendations or any applicable law.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

AT&T CORP.	QWEST CORPORATION		
Dingtley D. Bash Authorized Signature	Authorized Signature		
Name Printed/Typed	E.J. Stain p Name Printed/Typed		
	Director		
Title	Title		
Date	Date Date		

#### ATTACHMENT LOCAL NUMBER PORTABILITY MANAGED CUTS

- 1.0 A Managed Cut permits AT&T to select a coordinated cut for Local Number Portability ("LNP"). The request is offered on a 24 x 7 basis.
  - 1.1 The date and time for the coordinated cut requires up-front planning and may need to be negotiated between Qwest and AT&T. All requests will be processed on a first come, first served basis and are subject to Qwest's ability to meet a reasonable demand. Considerations such as system downtime, switch upgrades, switch maintenance, and the possibility of other Co-Providers requesting the same Frame Due Time (FDT) in the same switch (switch contention) are reviewed. In the event that any of these situations would occur, Qwest will negotiate with AT&T for an agreed upon FDT prior to issuing the Firm Order Confirmation (FOC). Because of this up-front coordination and FDT negotiation efforts, the FOC interval will begin upon completion of negotiations between Qwest and AT&T for the FDT. In special cases where a FDT must be negotiated, this interval to negotiate the FDT will not exceed two (2) days due to a Qwest error. In addition, standard intervals will apply.
  - 1.2 AT&T shall request a Managed Cut by submitting a Local Service Request (LSR) and designating a Managed Cut in the Remarks section of the LSR form.
  - 1.3 AT&T will incur additional charges for the managed cut dependent upon the FDT. The rates are based on whether the request is within normal business hours or out of hours. Normal business hours are 7:00 a.m. to 7:00 p.m., end user local time, Monday through Friday and the rate is a standard rate. Out of hours, except for Sundays and Holidays are at the overtime rate. Sundays and Holidays are at a premium rate.
  - 1.4 Charges for Managed cuts shall be based upon actual hours worked in ½ hour increments. Such charges are set forth in Section 1.7 below. AT&T understands and agrees that in the event AT&T does not make payment for Managed Cuts, unless disputed as permitted under the Agreement, Qwest shall not accept any new LSR requests for Managed Cuts.
  - 1.5 Qwest will schedule the appropriate number of employees prior to the cut, normally not to exceed three employees, based upon information provided by AT&T. AT&T will also have appropriate personnel scheduled for the negotiated FDT. If such information requires modification during the cut and, as a result, non-scheduled employees are required, AT&T shall be charged a three hour minimum charge per each additional non-scheduled employee as set forth in Section 1.7 below. If the cut is either cancelled, or supplemented (supp) to change the due date, within 24 hours of the negotiated FDT, AT&T will be charged a one person 3 hour minimum charge as set forth in Section 1.7 below. If the cut is cancelled or a new due date is requested by Qwest due to a Qwest error, within 24 hours of the negotiated FDT, Qwest will be charged by AT&T a one

person 3 hour minimum charge as set forth in Section 1.7 below. This AT&T charge will be replaced by any service performance plan related to LNP Managed Cuts, if any, adopted by the Regional Oversight Committee and approved by the Commission.

- 1.6 Qwest will negotiate with AT&T for LNP Managed Cuts or a similar service offered by AT&T.
- 1.7 Qwest will provide Managed Cuts at the following interim rates:

	Managed Cut standard	Recurring NA	\$ 27.38 per ½ hour per person
$\vdash$	Managed Cut overtime	Recurring NA	\$ 35.43 per 1/2 hour per person
	Managed Cut premium	Recurring NA	\$ 43.49 per ½ hour per person

- 1.8 In the event that the managed LNP conversion is not successful, AT&T and Qwest agree to isolate and fix the problem in a timeframe acceptable to AT&T or the customer. If the problem cannot be corrected within a timeframe acceptable to AT&T or the customer, AT&T may request the restoral of Qwest service for the customer. Such restoration shall begin immediately upon request. If AT&T is in error then a supp will be provided to Qwest. If Qwest is in error no supp or additional order will be required of AT&T.
- 1.9 Specific details regarding the ordering of LNP service is contained in the LNP Section of the Interconnect & Resale Resource Guide or this Agreement.

Qwest Corporation Law Department 200 South Fifth Street, Room 395 Minneapolis, MN 55402 (612) 672-8905-Phone (612) 672-8911-Fax

Qwest<sup>-</sup>

Jason D. Topp Attorney

August 8, 2001

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Re:

In the Matter of the Joint Application for Approval of the Third Amendment to

Interconnection Agreement between AT&T Communications of the Midwest,

Inc. and Qwest Corporation Docket No. P442.421/IC-01-1100

Dear Dr. Haar:

Pursuant to discussions with the Minnesota Department of Commerce and AT&T Communications of the Midwest, Inc. ("AT&T"), Qwest Corporation ("Qwest") submits for filing with the Minnesota Public Utilities Commission ("Commission") an original and three (3) copies of revised Third Amendment to the Negotiated Agreement for Interconnection and Resale between AT&T and Qwest. The original interconnection agreement was approved by the Minnesota Public Utilities Commission on March 17, 1997 in Docket No. P-442, 421/M-96-855.

This filing replaces the third amendment to the interconnection agreement between Qwest and AT&T Corp.. Qwest submitted to the Commission on July 18, 2001 in Docket No. P442,421/IC-01-1100 and is made in order to reflect the name in which AT&T is operating as telecommunications provider in Minnesota. This third amendment replaces in its entirety Schedule 1 and amends Schedule 2.

If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Very inuly yours

Jason D. Top

Attachment

2: Attached Service List



### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott Chair
Marshall Johnson Commissioner
LeRoy Koppendrayer Commissioner
Edward A. Garvey Commissioner
Phyllis Reha Commissioner

Re: In the Matter of the Joint Application for Approval of the Third Amendment to Interconnection Agreement between AT&T Communications of the Midwest, Inc. and Qwest Corporation Docket No. P442,421/IC-01-1100

#### AFFIDAVIT OF SERVICE

STATE OF MINNESOTA	<b>)</b>				
	) ss			.3	
COUNTY OF HENNEPIN	)	:			

Duane Scherr, being first duly sworn, deposes and says:

That on the 8th day of August, 2001, at the City of Minneapolis, State of Minnesota, he served the annexed filing on the party designated therein, by either delivery in person or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing same in the post office at Minneapolis, Minnesota, directed to said address or last known address.

Duane Scherr

Subscribed and sworn to me this 8th day of August, 2001.

Notary Public

DIANNE M. BARTHEL.
Notary Public
Minneson
My Commission Expers. Jn. 21, 2005

#### **Owest Service List**

Linda Chavez
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul. MN 55101-2198

Qwest Corporation
Director - Interconnection Compliance
1801 California Street, Room 2410
Denver, CO 80202-1984

Qwest Corporation
: Jim Gallegos
. porate Counsel, Interconnection
1801 California Street, 38th Floor
Denver, CO 80202

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Jason Topp Qwest Corporation 200 South Fifth Street, Room 395 Minneapolis, MN 55402

Christine Schwartz AT&T 1875 Lawrence Street, Room 10-74 Denver, CO 80202

Mike Hydock AT&T 1875 Lawrence Street, 10<sup>th</sup> Floor Denver, CO 80202

# Amendment Number 3 to the Interconnection Agreement Between AT&T Communications of the Midwest, Inc. and Qwest Corporation

This Amendment ("Amendment") is made and entered into by and between AT&T Communications of the Midwest, Inc. ("AT&T") and Qwest Corporation (formerly doing business as U S WEST Communications, Inc.) ("Qwest").

#### RECITALS

WHEREAS, AT&T and Qwest entered into an Interconnection Agreement for service in the state of Minnesota that was approved by the Minnesota Public Utilities Commission on March 14. 1997 (the "Agreement"); and

WHEREAS, AT&T and Qwest desire to amend the Agreement under terms and conditions contained herein.

#### AGREEMENT

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

#### 1. Amendment Terms.

This Amendment is made in order to replace, in its entirety, Schedule 1 and Schedule of the aforementioned Agreement, attached hereto and incorporated herein.

#### 2. Effective Date.

This Amendment shall be deemed effective upon approval by the appropriate state Commission; however, the Parties may agree to implement the provisions of this Amendment upon execution.

#### 3. Further Amendments.

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by written instrument executed by an authorized representative of both Parties.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

AT&T COMMUNICATIONS OF THE MIDWEST, INC.	QWEST CORPORATION
Michael Book Authorized Signature	Authorized Signature
MICHAEL HYDOCK Name Printed/Typed	L. T. Christensen Name Printed/Typed
DISTRICT MGE Title	<u>Director – Business Policy</u> Title
8/1/200) Date	5/7/2 ( Date

#### AT&T

#### SCHEDULE 1 MINNESOTA

Rates set forth in Schedule 1 reflect the final Minnesota Cost Docket Rates and Compliance Filing in Docket No. P-442, 5321, 3167, 466, 421/CI-96-1540, effective June 13, 2000.

Rates set forth in Schedule 1 reflect the final Minnesota UNE Deaveraged Rates in Docket No. P-999/CI-99-465, effective November 1, 2000.

TARIFFS SUB	JECT TO WHOLESALE DISCOUN	T OF 17.66%
U S WEST Communications Exchange & Network Services Tariff	Application and Reference     All subsections	
•	General Regulations     All subsections	
	3. Service Charges All subsections	
	4. Construction Charges & Other Special Charges  All subsections	
	5 Exchange Services All subsections	
	105. Obsolete Exchange Services All subsections	
	6. Message Telecommunication Services All subsections	
	7. Wide Area Telecommunication Service All subsections	
	8. Connections of Premises Equipment To Telecommunications Services All subsections	

•			
		•	•
•			
		9. Central Office Services	
		All subsections	
	9.	109. Obsolete Central Office	
		Services	
		All subsections	
		10. Misc. Service Offerings	
		All subsections	
		All Subsections	
		110. Obsolete Misc. Service	
		Offerings	
		All subsections	
		Ad Dala Attaches	
		11. Pole Attachments	
		All subsections	
	U S WEST	12. Open Network	
	Communications	Architecture (ONA) Services	
	Exchange & Network	Note: The (ONA) Service	
	Services Tariff (continued)	tariff	
		section references other	
		tariffs	
		and sections which are listed	1
		in	1
		this exhibit. Wholesale	
		discounts for referenced	
		tariffed	
		services apply to ONA.	
			13. Reserved
		14. Integrated Services	
		Digital Network	
		All subsections	
		15. Miscellaneous Switched	
		Digital Services	
· · · · · · · · · · · · · · · · · · ·		All subsections	
			16 19. Reserved
1 .		<u> </u>	10 19. Reserved
	•	20. Facilities for Radio	
		Carriers	
	1	All subsections	
		The second secon	21 24. Reserved
	And the second s		Z. ZT. Neserveu
		25. Customized Services	
		All subsections	
1			

	125. Obsolete Customized Services  All subsections	
U S WEST Communications Private Line Transport Services Tariff	Entire tariff, sections 1. through 6.	
U S WEST Communications Competitive Advanced Communications Services Tariff	Entire tariff, sections 1. through 6.	
U S WEST Communications Competitive Private Line Transport Services Tariff	Entire tariff, sections 1. through 6.	
U S WEST Communications Competitive Exchange and Network Services Tariff	Entire tariff	
Other Retail Services Deregulated	All retail service provided by US WEST	
Other Retail Service Unregulated	All retail services provided by U S WEST	
Other Retail Services Detariffed	All retail services provided by U S WEST	

#### AT&T

### AMENDED SCHEDULE 2 NETWORK ELEMENT PRICES FOR MINNESOTA

Rates set forth in Schedule 2 reflect the final Minnesota Cost Docket Rates and Compliance Filing in Docket No. P-442, 5321, 3167, 466, 421/CI-96-1540, effective June 13, 2000.

Rates set forth in Schedule 2 reflect the final Minnesota UNE Deaveraged Rates in Docket No. P-999/CI-99-465, effective November 1, 2000.

		<del></del>		
	Price			
Network Element	(Unbundled Network Elements)	Recurring	Install	Disconnect
				, e 1
Network Interface Device		\$0.49 per line per month	\$30.80	- 5
Loop Distribution		S11.66 per line per month	\$17.11	
Loop Concentrator/Multiplexer		\$2.55 per line per month		
Loop Feeder		\$3.18 per line per month	\$17.11	
2-Wire Cross Connect at FDI			\$17.11	\$16.11
4-Wire Cross Connect at FDI			\$45.35	\$22.37
Unbundled Loop - Analog			***************************************	
2-Wire Loop			\$2.38	S1.95
Zone 1		\$8.81		
Zone 2		\$12.33		
Zone 3		\$14.48		
Zone 4		\$21.91		
4-Wire Loop			\$13.77	\$10.15
Zone 1		\$17.87		
Zone 2		\$24.19		
Zone 3		\$28.49		
Zone 4	manufacture of the common to the common terms of the common terms	\$43.34	and the control of th	A CONTROL OF STREET OF STREET
Unloading/Bridge Tap Removal	i			
ISDN Extension Technology		-		

	Price			
Network Element	(Unbundled Network Elements)	Recurring	install	Disconnect
<b>%</b>		•		
Local Switching (LEC switch):				
Feature Changes			\$0.44	
Channelized DS1 Line port (TR-303-IDT)			\$21.20	S13.71
Port <sup>1</sup>		\$1.08	\$2.58	\$1.88
Usage		5.00181 per MOU		
Local switching - ISDN (BRI) port		\$17.96		·
Per System			\$ 92.01	
Per Port			\$115.90	
Per IDP System			\$204.67	næ.
Optional ISDN features	e e e e e e e e e e e e e e e e e e e		\$ 0.44	***
Operator Systems/Directory Assistance		S0.35 per call		
Entrance Facilities				İ
DS1		\$ 67.71	\$12.85 <sup>2</sup>	
DS3		\$191.50	\$12.85 <sup>2</sup>	ļ
LIS EICT		\$0.00	\$0.00	
Dedicated Transport DS0				
Over 0 to 8 Miles		\$39.18	\$12.85 <sup>2</sup>	
Over 8 to 25 Miles		\$39.18	\$12.85 <sup>2</sup>	
Over 25 to 50 Miles		\$39.18	\$12.85 <sup>2</sup>	
Over 50 Miles	¥	\$39.18	\$12.85 <sup>2</sup>	
DS1	1			
Over 0 to 8 Miles		\$100.65	\$12.85 <sup>2</sup>	
Over 8 to 25 Miles		\$100.65	\$12.85 <sup>2</sup>	
Over 25 to 50 Miles		\$100.65	\$12.85 <sup>2</sup>	

All switch features including Custom and CLASS.

The \$12.85 non-recurring charge (NRC) associated with the dedicated transport rate element is intended to be charged for each trunk established, e.g., if 24 trunks are established on a DS1 the \$12.85 would be applied 24 times. If the entrance facility dedicated transport, and the 24 trunks are ordered together, the \$12.85 NRC for the entrance facility is waived

_					
		Price		l	<del></del>
1	Network Element	(Unbundled Network Elements)	Recurring	Install	Disconnect
	<b>%</b>				
	Over 50 Miles		\$100.65	\$12.85 <sup>2</sup>	
	DS3				
. 1	Over 0 to 8 Miles				
	Over 8 to 25 Miles		\$2,818.20	\$12.85 <sup>2</sup>	
	Over 25 to 50 Miles		\$2,818.20	\$12.85 <sup>2</sup>	
			\$2,818.20	\$12.85 <sup>2</sup>	
	Over 50 Miles		<b>5</b> 2,818.20	\$12.85 <sup>2</sup>	
Ĺ	E-UDIT				
	DS1		\$ 67.71		
	DS3			\$12.85	
	Local Call Termination		\$191.50	\$12.85	, And Association (A.A.
		_			V6. 6 12
	Local Switching	Symmetrical Rates as applicable	\$0.00181 Per MOU		
	Tandem Switching		\$0.00134 per MOU		
(	Common Transport		\$0.00136 per MOU		
	Multiplexing, per arrangement				
- 1	DS3 to DS1		\$213.71	£202.00	
	DS1 to DS0		\$213.77	\$302.96	
			3203.47	\$295.92	A Argunia
	Common Channel Signaling/SS7				
	CCSAC STP Port per message				
	CCSAC Options Activation Charge		\$0.00014		
	Basic Translations				
	First Activation, per Order			\$21.43	S20.76
	Each Additional Activation, pe	r Order		\$21.43	\$20.76
į	CCSAC Options Database Translations				
	First Activation per order			\$29.17	28.50
_	Each additional Activation per c			\$29.17	28.50
	Signal Formulation, ISUP, Per Call Set-L	Jp Request	\$0.000121		
	Signal Transport, ISUP, Per Call Set-Up	Request	\$0.000121		
	Signal Transport, TCAP, per Data Requi		\$0.00110		
	Signal Switching, ISUP Per Call Set-Up				
. · · · <del></del>			S0.000121		
					Cart .

	Price			
Network Element	(Unbundled Network Elements)	Recurring	install	Disconnect
<b>%</b>				
Signal Switching, TCAP, Per Data Requ	est	\$0.00110		
Fiber Cross Connects			\$11.04	\$11.29
Signaling Links				
- SS7 Link		\$25.56	\$25.55	\$ 9.71
- D-Link		\$75.73		
Service Control Points/ Databases	per message	\$0.00110 database query		
8XX Database (price per query)	Basic Query	\$.00249		
Dark Fiber				
- Two dark fibers, per foot		\$0.002		
- Two dark fibers, with connections, per foot		\$0.004		
Shared Transport, Per Minute of Use		\$0.001484		-
UNE-Platform Pots <sup>3</sup>				
New Mechanized			\$0.67	\$0.44
New Manual			\$0.67	\$0.44
Existing Mechanized			\$0.67	\$0.44
Existing Manual			\$0.67	\$0.44
2-Wire, Analog Unbundled Loop				
Migration - POTS, ISDN (BRI) Loop			\$2.45	\$1.95
2-Wire Loop. Different CO - Migration			\$25.13	\$8.96
2-Wire Loop, Different CO - Install			\$9.27	58.96
4-Wire, Analog Unbundled Loop			: !	
Migration			\$24.61	\$10.15
4-Wire Loop Different CO - Migration			\$25.53	\$9.84
4-Wire Loop, Different CO - Install			\$9.75	\$9.84
DS1 Loop to Customer Premise – Migration			\$37.61	\$17.73
DS1 Loop to Customer Premise – Install (First/Each Add)			\$25.22	\$17.73
Channelized DS1 Virtual Feeder to		The second secon	\$22.90	\$16.18

To the extent that necessary rates, terms and conditions applicable to AT&T's UNE-P orders are not addressed in the Interconnection Agreement. Owest will accept, process and bill AT&T pursuant to the applicable rates, terms and conditions set forth in the template amendment and revised rate sheet that have been provided to AT&T.

	Price		i	
Network Element	(Unbundled Network Elements)	Recurring	install	Disconnect
<b>9.</b>		,		
Interim Number Portability – New York State Method				
Resale Customer Transfer Charge				
CTC for POTS Service				
- First Line (Mechanized)	·		\$0.41	\$0.44
- Each Additional Line (Mechanized)			\$0.41	\$0.44
- First Line (Manual)			\$0.41	\$0.44
- Each Additional Line (Manual)			\$0.41	\$0.44
Operational Interfaces:				
Gateway	Each Party pays own			
Utilization	cost			
	TSLRIC per order			
Virtual & Physical Collocation:				
Entrance Enclosure:	per foot per month			· .
Conduit and Interduct from Entrance Enclosure to Cable Vault.		\$0.0156 per foot per month		
Physical Collocation				
Fiber Optic Cable, Per Cable		\$2.55	\$1,124.21	
Fiber Cable Splicing			\$490.03 per	·
•			set-up.	
			S39.17 per fiber spliced	
Copper Cable per 25 pair	S0.012 per month			
Copper Cable Splicing	S91.27 per splice			
Copper Cable Placement in Conduit and Riser	\$1.66 per foot			
Coax Cable RG59	\$0.20 per foot per month			
Power Consumption-DC Plant, per Amp		\$4.43		<u> </u>
48 Volt DC Power Cable installation A and B Feeder Pair from Power Source				
to Leased physical space:	1		A service of the serv	1

Costs need to be developed after operational interface designed.

	Price			T
Network Element	(Unbundled Network Elements)	Recurring	install	Disconnec
<b>%</b> .				
Per 100 Amp (50 amp each feed)				
			\$214.28	
Per 200 Amp (100 amp each feed)				
AC Power per Amp	: '		\$279.27	
Humidification per leased physical		\$2.03		
space (included in Land & Building)				
Rack Space Per Shelf		\$21.29		
Labor Charges:				
Equipment Maintenance per hour per echnician	Normal Business Hours		\$41.06	
Staffed CO, During Attended Hours Initial Charge (Hours) 0.25 Subsequent Charge (Hours) 0.25				
ot Staffed CO, During Normal usiness Hours				
Initial Charge (Hours) 0.25 Subsequent Charge (Hours) 0.25				
taffed CO, During Unattended Hours Initial Charge (Hours) 4.00 Subsequent Charge (Hours) 0.25	Out of Normal Business Hours-4 hr minimum		\$41.06	
ot Staffed CO. During Non-normal				
usiness Hours Initial Charge (Hours) 4.00 Subsequent Charge (Hours) 0.25				
rtual Training per ½ hour	\$23.98-Normal Business Hours			
guipment Installation, Change, emoval-per ½ hour per technician	\$20.48-Normal Business Hours			
	\$31.33-Out of Normal Business Hours			
gineering Installation, Change, moval per ½ hour per technician	\$25.79-Normal Business Hours			
	\$39.30-Out of Normal Business Hours			

	Price			
Network Element	(Unbundled Network Elements)	Recurring	Install	Disconnect
<b>&amp;</b>				
Inspector Labor per 1 hour per technician	Normal Business Hours		\$41.06	
Staffed CO, During Attended Hours - Initial Charge (Hours) 0.25 - Subsequent Charge (Hours) 0.25				
Not Staffed CO, During Normal Business Hours - Initial Charge (Hours) 0.25 - Subsequent Charge (Hours) 0.25				
Staffed CO, During Unattended Hours - Initial Charge (Hours) 4.00 - Subsequent Charge (Hours) 0.25	Out of Normal Business Hours-4 hr minimum		\$41.06	
Not Staffed CO, During Non-normal Business Hours - Initial Charge (Hours) 4.00 - Subsequent Charge (Hours) 0.25				<i>,</i> <b>, ≈</b>
Physical Collocation:			*	
Wire Cage Enclosure, 4 Walls, 8 ft. High w/Central HVAC:			·	
0-100 sq. ft.	(prices are for construction of a 100 sq ft cage)	\$16.06 (Based on 100 sq. ft.)		
101-200 sq. ft		\$32.12 (Based on 200 sq. ft.)	·	:
201-300 sq. ft		\$48.06 (Based on 300 sq. ft.)		
301-400 sq. ft.		\$64.24 (Based on 400 sq. ft.)		
Wire Cage Enclosure, 4 Walls, 8 ft. High w/Standalone HVAC:				
0 - 100 sq. ft.	\$355.00 per month			
101 - 200 sq. ft.	\$445.00 per month			
201 - 300 sq. ft.	\$550.00 per month		1 .	
301 - 400 sq. ft.	\$600.00 per month			
Wire Cage Enclosure, 4 Walls, 15 ft. High w/Central HVAC:		and the second s		and the second s
0 - 100 sq. π.	\$255.00 per month			
101 - 200 sq. ft.	\$315.00 per month			

	Price			
Network Element	(Unbundled Network Elements)	Recurring	Install	Disconnect
•			·	
201 - 300 sq. ft.	S365.00 per month			
301 - 400 sq. ft.	\$415.00 per month			
Wire Cage Enclosure, 4 Walls, 15 ft. High w/Standalone HVAC:				
0 - 100 sq. ft.	\$385.00 per month	en de la companya de		
101 - 200 sq. ft.	\$495.00 per month			
201 - 300 sq. ft.	\$600.00 per month			
301 - 400 sq. ft.	\$655.00 per month			

LOCATION			· · · · · · · · · · · · · · · · · · ·
Physical			- : >=
Physical			
Cage Planning		\$3,406.46	•
Cage Construction (prices are for construction of a 100 sq ft cage)	\$16.06		
Grounding (per 100 sq ft)	\$4.30		
Cage Preparation (per 100 sq ft)	\$109.88		
Land & Building (per 100 sq ft)	\$541.50		
Fiber Splicing			
Per set-up		\$490.03	
Per Fiber Spliced		\$39.17	
Power Consumption			
AC Usage, per Amp	\$2.03		
Essential AC Power, Per Amp			
120V	\$16.13		<del></del>
208 V Single Phase	\$27.95		
208 V Three Phase	\$48.36		<del></del>
240 V Single Phase	\$32.25		<del></del>
240 V Three Phase	\$55,80		
480 ∨ Single Phase	\$111.60		
Essential AC Power Feed, per foot	1		
20 Amp. Single Phase	\$0.02	\$10.06	
20 Amp. Three Phase	\$0.02	\$12.42	

	10 Ama Signia Massa			
	30 Amp. Single Phase	\$0.02	\$10.83	
· · · · · · · · · · · · · · · · · · ·	30 Amp, Three Phase	\$0.02	\$14.79	
1	O Amp, Single Phase	\$0.02	\$12.69	
	0 Amp, Three Phase	\$0.03	\$17.38	
1	50 Amp, Single Phase	\$0.02	\$15.01	
	50 Amp, Three Phase	\$0.03	\$20.85	
1	50 Amp, Single Phase	\$0.03	\$16.94	
<b>!</b>	60 Amp, Three Phase	\$0.04	\$23.97	
1 2.1	100 Amp, Single Phase	\$0.03	\$20.91	
	100 Amp, Three Phase	\$0.05	\$32.52	
Vo	pice Grade Circuits			·
	Connection to MDF, per 100 circuits	\$5.03	\$901.01	
ID:	S1 Circuits			<del>.</del>
1 1	Connection to DCS, per 28 circuit	\$228.70	\$1,368.20	
4 1	Connection to DSX, per 28 circuit	\$11.28	\$1,368.20	
	S3 Circuits			
1	Connection to DCS, per 1 circuit	\$57.35	\$349.63	
i	Connection to DSX, per 1 circuit	\$9.89	\$349.63	
1	ptical Circuits		1	
-	Connection to FDF	\$6.50	\$2.524.10	
S	ecurity Access Cards - per 5 cards		\$89.28	
c	omposite Clock – per port	\$8.37		
IU	nique Prices for Cageless and Virtual			
			21.000.50	
1	lanning (equipment & cabling)		\$4,323.59	
	lanning (subsequent requests for cabling only)		31.310.18]	
	and & Building	\$8.86		
1	elay Rack	\$2.05	<del></del>	
1			<del></del>	
E	ntrance Fiber, per cable	\$12.63	\$1,124.21	
			i	
P	ower Delivery (for cable rack)	\$0.06		
P	ower Consumption			
1	DC Plant, per Amp	54.93	!	·
	AC Usage, per Amb	\$2.03		

Composite Clock	\$8.37		• • • • •
			<u>عمر</u>
Connection for DS3		5137.73	
Connection for DS1		\$538.99	
Cable Racking for DS1 or DS3	S0.15i	ii	
Cable Racking for Fiber	\$0.19		
Virtual to Virtual Connection			
Connection to 1 51			
Connection to FDF	\$6.50I	\$2,191.99	<del></del>
Optical Circuits		<del></del>	
Connection to DSX, per 1 circuit	93.03	3343.03	<del> </del>
Connection to DCS, per 1 circuit	\$9.89	\$349.63	
DS3 Circuits	\$57.35	\$349.63	
DC2 Circuita			
Connection to DSX, per 28 circuit	\$11.28	S1.368.20	
Connection to DGS, per 28 circuit	\$228.70	\$1.368.20	
DS1 Circuits	2000 70		
Connection to MDF, per 100 circuits	\$5.03	\$901.01	

Qwest Corporation Law Department 200 South Fifth Street, Room 395 Minneapolis, MN 55402 (612) 672-8905-Phone (612) 672-8911-Fax

Qwest-

Jason D. Topp

July 30, 2001

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Re:

In the Matter of the Joint Application for Approval of the Fourth Amendment to Interconnection Agreement between AT&T Corp. and Qwest Corporation

Dear Dr. Haar:

Enclosed for filing with the Minnesota Public Utilities Commission are an original and three (3) copies of the above-referenced amendment to the interconnection agreement. The original interconnection agreement was approved by the Minnesota Public Utilities Commission on March 17, 1997 in Docket No. P-442, 421/M-96-855. This fourth amendment incorporates certain terms and conditions to enable CLEC to receive blocking reports on all interoffice trunk groups carrying EAS/local traffic between Qwest tandem switches and Qwest end office switches for Interconnection Trunk Reports.

If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Very truly yours,

Vason D. Topp

Attachment

cc: Attached Service List



### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott Chair

Marshall Johnson Commissioner

LeRoy Koppendrayer Commissioner

Edward A. Garvey Commissioner

Phyllis Reha Commissioner

Re: In the Matter of the Joint Application for Approval of the Fourth Amendment to Interconnection Agreement between AT&T Corp. and Qwest Corporation

#### AFFIDAVIT OF SERVICE

STATE OF MINNESOTA )

SS
COUNTY OF HENNEPIN )

Duane Scherr, being first duly sworn, deposes and says:

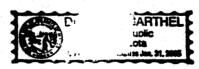
That on the 30th day of July, 2001, at the City of Minneapolis, State of Minnesota, he served the annexed filing on the party designated therein, by either delivery in person or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing same in the post office at Minneapolis, Minnesota, directed to said address or last known address.

Subscribed and sworn to me this 30th day of July, 2001.

MAN MAN POR NEAR !

Notary Public

BARTHEL Public Sotta Jones Jan. 21, 2005



#### **Qwest Service List**

Linda Chavez Minnesota Department of Commerce 85 7th Place East, Suite 500 St. Paul, MN 55101-2198

Qwest Corporation Director - Interconnection Compliance 1801 California Street, Room 2410 Denver, CO 80202-1984

Qwest Corporation

A---: Jim Gallegos

Corate Counsel, Interconnection

1801 California Street, 38th Floor

Denver, CO 80202

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Jason Topp Qwest Corporation 200 South Fifth Street, Room 395 Minneapolis, MN 55402

Christine Schwartz
AT&T ICA Negotiations Manager
AT&T
1875 Lawrence Street, Room 10-74
Denver, CO 80202

# Amendment Number 4 to the Interconnection Agreement Between AT&T Corp. and Qwest Corporation Minnesota

This Amendment ("Amendment") is made and entered into by and between AT&T Corp. ("CLEC") and Qwest Corporation ("Qwest").

#### RECITALS

WHEREAS, CLEC and Qwest entered into an Interconnection Agreement (the "Agreement") for service in the state of Minnesota that was approved by the Minnesota Public Utilities Commission ("Commission"); and

WHEREAS, CLEC and Qwest desire to amend the Agreement under terms and conditions contained herein.

#### **AGREEMENT**

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

#### 1. Amendment Terms.

This Amendment is made in order to add the terms and conditions to enable CLEC to receive blocking reports on all interoffice trunk groups carrying EAS/local traffic between Qwest tandem switches and Qwest end office switches for Interconnection Trunk Reports as set forth in Attachment 1, attached hereto and incorporated herein.

#### 2. Effective Date.

This Amendment shall be deemed effective upon approval by the Commission; however, the Parties may agree to implement the provisions of this Amendment upon execution. To accommodate this need, CLEC must generate, if necessary, an updated Customer Questionnaire. In addition to the Questionnaire, all system updates will need to be completed by Qwest. CLEC will be notified when all system changes have been made. Actual order processing may begin once these requirements have been met.

#### 3. Further Amendments.

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by written instrument executed by an authorized representative of both Parties.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

AT&T CORP.	QWEST CORPORATION
Michael Hedock	LI Cleunte
Authorized Signature	Authorized Signature
MICHAEL HYDOCK	L. T. Christensen
Name Printed/Typed	Name Printed/Typed
DISTRICT MANAGER-ICA	Director - Business Policy
Title	Title
7/16/2001 Date	7/20/0/
Date	Date / (

#### ATTACHMENT 1

#### **BLOCKING REPORTS**

Qwest shall provide to CLEC monthly reports on all interconnection trunk groups and quarterly reports on all interoffice trunk groups carrying EAS/local traffic between Qwest tandem switches and Qwest end office switches. The reports will contain busy hour traffic data, including but not limited to, overflow and the number of trunks in each trunk group.

Qwest Corporation Law Department 200 South Fifth Street, Room 395 Minneapolis, MN 55402 (612) 672-8905-Phone (612) 672-8911-Fax

Jason D. Topp Attorney



January 31, 2002

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Re: In the Matter of the Joint Application for Approval of the Fifth Amendment Collocation Cancellation Amendment to the

Interconnection Agreement between AT&T Communications of the

Midwest, Inc. and Qwest Corporation

Dear Dr. Haar:

Enclosed for filing with the Minnesota Public Utilities Commission are an original and three (3) copies of the above-referenced amendment to the interconnection agreement. The original interconnection agreement was approved by the Minnesota Public Utilities Commission on March 17, 1997, in Docket No. P-442, 421/M-96-855. This fifth amendment incorporates certain terms, conditions and rates for Collocation Cancellation.

If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Very truly yours,

Jason D. Topp

JDT/bardm

**Enclosures** 

cc: Attached Service List

### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott Chair

Marshall Johnson Commissioner

LeRoy Koppendrayer Commissioner

Edward A. Garvey Commissioner

Phyllis Reha Commissioner

Re: In the Matter of the Joint Application for Approval of the Fifth Amendment Collocation Cancellation Amendment to the Interconnection Agreement between AT&T Communications of the Midwest, Inc. and Qwest Corporation

#### AFFIDAVIT OF SERVICE

STATE OF MINNESOTA	)	
	)	SS
COUNTY OF HENNEPIN	)	

Duane Scherr, being first duly sworn, deposes and says:

That on the 31st day of January, 2002, at the City of Minneapolis, State of Minnesota, he served the annexed filing on the party designated therein, by either delivery in person or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing same in the post office at Minneapolis, Minnesota, directed to said address or last known address.

Subscribed and sworn to me this 31st day of January, 2001.

**Notary Public** 

DIANNE M. BARTHEL
Notary Public
Minnerty

Mune Scherr

#### **Owest Service List**

Linda Chavez
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Qwest Corporation
Director - Interconnection Compliance
1801 California Street, Room 2410
Denver, CO 80202-1984

Qwest Corporation

1: Jim Gallegos

1: porate Counsel, Interconnection
1801 California Street, 38th Floor
Denver, CO 80202

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Jason Topp Qwest Corporation 200 South Fifth Street, Room 395 Minneapolis, MN 55402

Mitchell H. Menezes Chief Commercial Counsel AT&T Corp. 1875 Lawrence Street, Room 15-21 Denver, CO 80202

Michael Hydock
District Manager Local Service
AT&T Corp.
1875 Lawrence Street, Room 8-19
Denver, CO 80202

## Amendment No. 5 Collocation Cancellation Amendment to the Interconnection Agreement between Qwest Corporation and AT&T Communications of the Midwest, Inc. for the State of Minnesota

This is an Amendment ("Amendment") to include the services described in Attachment 1 in the Interconnection Agreement between Qwest Corporation ("Qwest"), a Colorado corporation, and AT&T Communications of the Midwest, Inc. ("CLEC"). CLEC and Qwest shall be known jointly as the "Parties".

#### **RECITALS**

WHEREAS, CLEC and Qwest entered into an Interconnection Agreement ("Agreement") for service in the state of Minnesota which was approved by the Minnesota Public Utilities Commission ("Commission"); and

WHEREAS, the Parties wish to amend the Agreement further under the terms and conditions contained herein.

#### **AGREEMENT**

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

#### **Amendment Terms**

The Agreement is hereby amended by adding terms, conditions and rates for Collocation Cancellation as set forth in Attachment 1 to this Amendment, attached hereto and incorporated herein by this reference.

#### **Effective Date**

This Amendment shall be deemed effective upon approval by the Commission; however, the Parties may agree to implement the provisions of this Amendment upon execution. To accommodate this need, CLEC must generate, if necessary, an updated Customer Questionnaire. In addition to the Questionnaire, all system updates will need to be completed by Qwest. CLEC will be notified when all system changes have been made. Actual order processing may begin once these requirements have been met. Qwest shall be in a position to process such orders within a reasonable time after execution of this Amendment, assuming Qwest has received all necessary information from CLEC by the time this Amendment is fully executed.

#### **Further Amendments**

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by Collocation Cancellation Amd 5 ATT-MN

written instrument executed by an authorized representative of both Parties.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

Qwest Corporation /
ho Climber
Signature
L. T. Christensen
Name Printed/Typed
Director - Business Policy
Title
1/22/02
Date / /

#### **ATTACHMENT 1**

#### **Collocation Cancellation**

If terms and conditions for Collocation Cancellation are included in the CLEC Interconnection Agreement, and those terms differ from those set forth in this document, the terms of the Interconnection Agreement will prevail.

#### 1. Description

- 1.1 Cancellation is available for all Collocation sites under a particular Billing Authorization Number (BAN) for which the CLEC has not received notification of completion from Qwest of CLEC's Collocation Application. A Cancellation will only occur upon request by the canceling CLEC.
- 1.2 Cancellation is offered for Caged Physical, Cageless Physical, Virtual, and ICDF Collocation.
- 1.3 All other types of collocation to be cancelled will be handled on an Individual Case Basis (ICB) by contacting the appropriate Qwest Wholesale Collocation Project Manager.
- 1.4 A request for Cancellation is irrevocable once Qwest has accepted the Cancellation Application.

#### 2. Terms and Conditions

- 2.1 The canceling CLEC, may only submit a Cancellation Application if a Collocation quote has been accepted and the initial payment has been paid. The collocation Cancellation may only be initiated if the Collocation job is in progress and not yet complete.
- 2.2 Qwest will stop work on a job in progress upon receipt and acceptance by Qwest of a complete Cancellation Application.
- 2.3 Based on when the Cancellation Application is received by Qwest, the completion status of the Collocation job and the determination of the amount paid to Qwest, the following will occur: Qwest will cancel the Collocation job in progress, conduct an inventory, and issue a final revised quote setting forth the amount due or the appropriate credit adjustments, based on work performed and expenses incurred by Qwest. The revised final quote will be issued within 30 calendar days of Qwest's acceptance of the Cancellation Application.
- 2.4 The Quote Preparation Fee (QPF) for the original Collocation Request must be paid, if the job is cancelled.
- 2.5 In the event Splitter Collocation with the BAN of the collocation site is to be canceled, such Splitter Collocation will be cancelled automatically pursuant to the submitted Cancellation Application.

2.6 In the event that CLEC has requested Direct CLEC-to-CLEC connections with the BAN of the collocation site or Collocation Application to be cancelled, such Direct CLEC-to-CLEC will be cancelled automatically pursuant to the submitted Cancellation Application.

#### 3. Rate Elements

3.1 Pursuant to the terms of this Agreement, Qwest will not charge for the cancellation service except as specifically provided herein.

#### 4. Ordering

- 4.1 Cancellation requires submission of a "Cancellation, Decommission, Change of Responsibility Application Form".
  - 4.1.1 The Application form is located on the Qwest web site at: http://www.qwest.com/wholesale/pcat/collocation.html
  - 4.1.2 The Application must be submitted to <a href="mailto:colo@gwest.com">colo@gwest.com</a> and <a href="mailto:rfsmet@gwest.com">rfsmet@gwest.com</a>
  - 4.1.3 Qwest will follow its standard Cancellation order validation procedures, providing acknowledgment of acceptance or rejection within one business day of receipt of a valid and complete Application. If Qwest rejects CLEC's Cancellation Application, Qwest shall identify the reasons for rejection, including any information omitted from the application that is necessary for Qwest to accept the application.

Owest Corporation Law Department 200 South Fifth Street, Room 395 Minneapolis, MN 55402 (612) 672-8905-Phone (612) 672-8911-Fax

Jason D. Topp Attorney



January 31, 2002

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Re: In the Matter of the Joint Application for Approval of the Sixth

Amendment Collocation Decommission Amendment to the

Interconnection Agreement between AT&T Communications of the

Midwest, Inc. and Qwest Corporation

Dear Dr. Haar:

Enclosed for filing with the Minnesota Public Utilities Commission are an original and three (3) copies of the above-referenced amendment to the interconnection agreement. The original interconnection agreement was approved by the Minnesota Public Utilities Commission on March 17, 1997, in Docket No. P-442, 421/M-96-855. This sixth amendment incorporates certain terms, conditions and rates for Collocation Decommission.

If you have any questions or require additional information, please do not hesitate to contact me. Thank you for your consideration.

Very truly yours,

Jason D. Topp

JDT/bardm

**Enclosures** 

cc: Attached Service List

#### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Gregory Scott Chair

Marshall Johnson Commissioner

LeRoy Koppendrayer Commissioner

Edward A. Garvey Commissioner

Phyllis Reha Commissioner

Re: In the Matter of the Joint Application for Approval of the Sixth Amendment Collocation Decommission Amendment to the Interconnection Agreement between AT&T Communications of the Midwest, Inc. and Qwest Corporation

#### AFFIDAVIT OF SERVICE

STATE OF MINNESOTA	)	
	)	SS
COUNTY OF HENNEPIN	<b>,</b> ).	

Duane Scherr, being first duly sworn, deposes and says:

That on the 31st day of January, 2002, at the City of Minneapolis, State of Minnesota, he served the annexed filing on the party designated therein, by either delivery in person or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing same in the post office at Minneapolis, Minnesota, directed to said address or last known address.

Muaul Allen Duane Scherr

Subscribed and sworn to me this 31st day of January, 2001.

Notary Public

DIANNE M. BARTHEL
Notary Public
Minnesota
My Commission Expres Jan. 91, 2005

#### **Owest Service List**

Linda Chavez
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Qwest Corporation
Director - Interconnection Compliance
1801 California Street, Room 2410
Denver, CO 80202-1984

Qwest Corporation
n: Jim Gallegos
proporate Counsel, Interconnection
1801 California Street, 38th Floor
Denver, CO 80202

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

Jason Topp Qwest Corporation 200 South Fifth Street, Room 395 Minneapolis, MN 55402

Mitchell H. Menezes Chief Commercial Counsel AT&T Corp. 1875 Lawrence Street, Room 15-21 Denver, CO 80202

Michael Hydock
District Manager Local Service
AT&T Corp.
1875 Lawrence Street, Room 8-19
Denver, CO 80202

## Amendment No. 6 Collocation Decommission Amendment to the Interconnection Agreement between Qwest Corporation and AT&T Communications of the Midwest, Inc. for the State of Minnesota

This is an Amendment ("Amendment") for Collocation Decommission to the Interconnection Agreement between Qwest Corporation ("Qwest"), a Colorado corporation, and AT&T Communications of the Midwest, Inc. ("CLEC"). CLEC and Qwest shall be known jointly as the "Parties".

#### **RECITALS**

WHEREAS, CLEC and Qwest entered into an Interconnection Agreement ("Agreement") for service in the state of Minnesota which was approved by the Minnesota Public Utilities Commission ("Commission"); and

WHEREAS, the Parties wish to amend the Agreement further under the terms and conditions contained herein.

#### **AGREEMENT**

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

#### **Amendment Terms**

The Agreement is hereby amended by adding terms, conditions and rates for Collocation Decommission as set forth in Attachment 1 and Exhibit A, to this Amendment, attached hereto and incorporated herein by this reference.

#### **Effective Date**

This Amendment shall be deemed effective upon approval by the Commission; however, the Parties may agree to implement the provisions of this Amendment upon execution. To accommodate this need, CLEC must generate, if necessary, an updated Customer Questionnaire. In addition to the Questionnaire, all system updates will need to be completed by Qwest. CLEC will be notified when all system changes have been made. Actual order processing may begin once these requirements have been met. Qwest shall be in a position to process such orders within a reasonable time after execution of this Amendment, assuming Qwest has received all necessary information from CLEC by the time this Amendment is fully executed.

#### **Further Amendments**

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by Collocation Decommission ATT-MN Amd 6
Amendment to SEA-970508-1804/dhd/01/09/2002

written instrument executed by an authorized representative of both Parties.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

AT&T Communications of	Qwest Corporation
the Midwest, Inc.	17 Thinte
Signature	Signature
GREG/TERRY	L. T. Christensen
Name Printed/Typed	Name Printed/Typed
UP-ATAT	Director - Business Policy
Title	Title
1/15/02	1/22/02
Date	Date

#### **ATTACHMENT 1**

#### **Collocation Decommission**

If terms and conditions for Collocation Decommissioning are included in the CLEC Interconnection Agreement, and those terms differ from those set forth in this document, then the terms of the Interconnection Agreement will prevail.

#### 1. Description

- 1.1 Decommissioning refers to the deactivation of a Collocation site occupied by CLEC and removal of CLEC equipment there from.
- 1.2 Decommissioning is offered for Caged Physical, Cageless Physical, Virtual, and ICDF Collocation.
- 1.3 All other types of collocation to be decommissioned will be handled on an Individual Case Basis (ICB) by contacting the appropriate Qwest Wholesale Project Manager (WPM).
- 1.4 An application for Decommissioning is irrevocable once Qwest accepts the application.

#### 2. Terms and Conditions

- 2.1 A Collocation site will be considered eligible for decommissioning after the site is builtout and accepted by CLEC pursuant to the terms of the Agreement.
- 2.2 Qwest requests the vacating CLEC remove equipment prior to submitting a Decommissioning Application.
- 2.3 If CLEC does not remove equipment within thirty calendar days after Qwest's acceptance of the Decommissioning Application, Qwest will send a notification to CLEC stating the equipment is considered abandoned.
  - 2.3.1 Upon receiving notification of abandonment from Qwest, CLEC will have fifteen calendar days to notify Qwest that the equipment is not abandoned or to remove equipment.
  - 2.3.2 Qwest will review CLEC responses and assess if the equipment has been abandoned in Qwest's reasonable discretion, after such fifteen (15) calendar days has passed. If CLEC does not remove the equipment in question and Qwest determines that the same has been abandoned, Qwest will send a final notification and bill for the labor charges associated with Qwest's removal of the abandoned equipment.
  - 2.3.3 In the case of Virtual Collocation, Qwest will automatically remove all equipment within ninety calendar days after receipt of CLEC's Decommissioning Application.
    - 2.3.3.1 Qwest will negotiate with CLEC for the pick up of the equipment.
    - 2.3.3.2 For Virtual Collocation, there will be no cost for the removal of CLEC

#### equipment.

- 2.4 Prior to submitting a Decommissioning Application, financial obligations with respect to the collocation site to be decommissioned must be current, with the exception of formally disputed charges.
  - 2.4.1 CLEC financial obligations include payment of 100% of all non-recurring quoted charges and all applicable monthly recurring charges that are more than 30 days past due.
- 2.5 CLEC must disconnect all services from the Collocation site to be decommissioned prior to submitting the Decommissioning Application. Services to be disconnected by CLEC include, but are not limited to: Unbundled Network Elements, administrative lines, finished services, and line sharing services. Services will need to be disconnected via ASR/LSR. If CLEC does not disconnect services, all charges with respect to such site will continue to accrue and the Decommissioning Application will be rejected.
- 2.6 Prior to disconnecting the circuits associated with the Collocation site CLEC must notify, in writing, all current end users and service customers affected by such disconnection of the discontinuation of service.
- 2.7 CLEC must submit an e-mail notification attached to the Decommissioning Application representing to Qwest that all end users and service customers have been properly notified. Failure to include such representation will result in the rejection of the Decommissioning Application.
- 2.8 Reserved.
- 2.9 When submitting a Decommissioning Application for a Collocation site that also has a Direct CLEC-to-CLEC arrangement:
  - 2.9.1 Qwest requires that the Direct CLEC-to-CLEC Connection be disconnected at the same time that Qwest performs the decommissioning.
  - 2.9.2 The CLEC submitting the Decommissioning Application must:
    - 2.9.2.1 Submit a Letter of Authorization signed by both the vacating CLEC and partnering CLEC that authorizes Qwest to disconnect the installed Direct CLEC-to-CLEC cabling.
    - 2.9.2.2 If a copy of the required Letter of Authorization is not attached to the Decommissioning Application, the application will be rejected as incomplete.
- 2.10 CLEC will be eligible for reimbursement on the re-usable elements (cable terminations including DS0, DS1, DS3, fiber terminations, and splitter cabling) for up to one calendar year from the Decommission Application submit date. An inventory will be completed by Qwest and furnished within 90 calendar days of the Decommission Application acceptance identifying the re-useable elements and the potential credit.

2.11 CLEC is required to return the space to turnover condition. Turnover condition is defined as the same condition in which CLEC originally assumed the Collocation site from Qwest upon Qwest's completion of the work called for by CLEC's original collocation application.

#### 3. Rate Elements

- 3.1 Under the terms of this Agreement, Qwest will not charge for the decommissioning service provided herein, unless equipment has been abandoned or the Collocation space has not been returned to turnover condition. In such cases, the applicable rates shall be the following:
  - 3.1.1 Miscellaneous labor hourly charges as defined in the attached Exhibit A will apply,
  - 3.1.2 Additional dispatch charges, will apply for unmanned offices, as defined in the attached Exhibit A.

#### 4. Ordering

- 4.1 The decommission process requires the submission of a "Cancellation, Decommission, Change of Responsibility Application Form".
  - 4.1.1 The Application form is located on the Qwest web at: <a href="http://www.qwest.com/wholesale/pcat/collocation.html">http://www.qwest.com/wholesale/pcat/collocation.html</a>
  - 4.1.2 The Decommissioning Application should be submitted to: <u>colo@gwest.com</u> <u>and rfsmet@gwest.com</u>.
  - 4.1.3 Qwest will notify CLEC within one business day after CLEC submits the Decommissioning Application if the prerequisites have been met. If Qwest believes that such prerequisites have not been met, Qwest will specifically identify the information needed to make the Decommissioning Application complete. Qwest will validate the order within two business days from receipt of the application.

#### **EXHIBIT** A

#### Minnesota

* Per 1/2 hour or fraction thereof		Recurring	Non Recurring	• • • • • • • • • • • • • • • • • • • •
* Additional Labor Other - Basic	T	1	\$27.54	1
* Additional Labor Other – Overtime		1	\$36.85	1
* Additional Labor Other – Premium			\$46.17	1
Additional Dispatch	2	1	\$87.11	1

[1] Rates not addressed in the Qwest/AT&T compliance filing. Qwest forward looking based costs where required.

### **EXHIBIT LBB-23**

DOCUMENTS ARE SUBJECT TO \\
REVIEW BEFORE ACCEPTANCE
AS A DOCKETED ITEM.

## AGREEMENT FOR LOCAL WIRELINE NETWORK INTERCONNECTION AND SERVICE RESALE

Between
AT&T Communications of the Mountain States, Inc.
and
U S WEST Communications, Inc.

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Attachment 6	Electronic Interfaces
Attachment 7	Implementation Schedule

This Interconnection Agreement (this "Agreement"), effective [insert date], 1997 (the "Effective Date"), is entered into by and between AT&T Communications of the Mountain States, Inc., a Colorado corporation, and U S WEST Communications, Inc., a Colorado corporation, to establish the rates, terms and conditions for local interconnection, local resale, and the purchase of unbundled network elements (individually referred to as the "service" or collectively as the "services").

#### **RECITALS**

WHEREAS, pursuant to this Agreement, AT&T and U S WEST will extend certain arrangements to one another within each LATA in which they both operate within Arizona. This Agreement is a combination of agreed terms and terms imposed by arbitration under Section 252 of the Communications Act of 1934, as modified by the Telecommunications Act of 1996, the rules and regulations of the Federal Communications Commission, and the orders, rules and regulations of the Arizona Corporation Commission; and as such does not necessarily represent the position of either Party on any given issue; and

WHEREAS, the Parties wish to interconnect their local exchange networks in a technically and economically efficient manner for the transmission and termination of calls, so that subscribers of each can seamlessly receive calls that originate on the other's network and place calls that terminate on the other's network, and for AT&T's use in the provision of exchange access ("Local Interconnection"); and

WHEREAS, AT&T wishes to purchase Telecommunications Services for resale to others, and U S WEST is willing to provide such services; and

WHEREAS, AT&T wishes to purchase on an unbundled basis Network Elements, Ancillary Services and Functions and additional features separately or in any Combination, and to use such services for itself or for the provision of its Telecommunications Services to others, and USWEST is willing to provide such services:

Now, therefore, in consideration of the terms and conditions contained herein, AT&T and U S WEST hereby mutually agree as follows:

#### SCOPE OF AGREEMENT

- A. This Agreement specifies the rights and obligations of each Party with respect to the purchase and sale of Local Interconnection, Local Resale and Network Elements in the LATAs in Arizona where U S WEST operates.
- B. In the performance of their obligations under this Agreement, the Parties shall act in good faith and consistently with the intent of the Act. Where notice, approval or similar action by a Party is permitted or required by any provision of this Agreement (including, without limitation, the obligation of the Parties to further negotiate the resolution of new or open issues under this Agreement) such action shall not be unreasonably delayed, withheld or conditioned.
- C. USWEST will provide AT&T with at least the level of service quality or performance of obligations under this Agreement as USWEST provides itself or any other Person with respect to all Telecommunications Services, Local Interconnection, Services for Resale, and Network Elements as applicable and shall provide such level of service quality or performance of service obligations in accordance with the specific requirements agreed to in Attachment 5.
- D. U S WEST shall provide to AT&T Services for Resale that are equal in quality, subject to the same conditions (including the conditions in U S WEST's effective tariffs which are not otherwise inconsistent with the terms and conditions contained herein), within the same provisioning time intervals that U S WEST

provides these services to itself, its Affiliates and others, including end users, and in accordance with any applicable Commission service quality standards, including standards the Commission may impose pursuant to Section 252 (e)(3) of the Act.

- E. Each Network Element provided by U S WEST to AT&T shall be at least equal in the quality of design, performance, features, functions, capabilities and other characteristics, including, but not limited to, levels and types of redundant equipment and facilities for power, diversity and security, that U S WEST provides to itself, U S WEST's own subscribers, to a U S WEST Affiliate or to any other entity.
- F. The Parties agree to work jointly and cooperatively in testing and implementing processes for pre-ordering, ordering, maintenance, provisioning and billing and in reasonably resolving issues which result from such implementation on a timely basis.
- G. If a Party makes a change in its network which it believes will materially affect the interoperability of its network with that of the other Party, the Party making the change shall provide advance notice of such change to the other Party in accordance with applicable FCC or Commission regulations.
- H. In accordance with Section 251(c)(5) of the Act and the rules and regulations established by the FCC and the Commission, the Parties shall provide reasonable notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or network, as well as of any other changes that would affect the interoperability of those facilities and networks.
- I. Except as otherwise provided for in Section 8 of Attachment 2, USWEST shall not discontinue or refuse to provide any service required hereunder without AT&T's prior written agreement in accordance with Section 17 of this Part A of this Agreement, nor shall USWEST reconfigure, reengineer or otherwise redeploy its network in a manner which would materially impair AT&T's ability to offer Telecommunications Services in the manner contemplated by this Agreement, the Act or the FCC's rules and regulations. USWEST agrees that all obligations undertaken pursuant to this Agreement, including, without limitation, performance standards, intervals, and technical requirements are material obligations hereof and that time is of the essence.

## **DEFINITIONS**

Certain terms used in this Agreement shall have the meanings set forth herein or as otherwise elsewhere defined throughout this Agreement. Other terms used but not defined herein will have the meanings ascribed to them in the Act and the FCC's rules and regulations.

"911 Service" means a universal telephone number which gives the public direct access to the Public Safety Answering Point (PSAP). Basic 911 service collects 911 calls from one or more local exchange switches that serve a geographic area. The calls are then sent to the correct authority designated to receive such calls.

"911 Site Administrator" is a person assigned by AT&T to establish and maintain 911 service location information for its subscribers.

"Access Services" refers to interstate and intrastate switched access and private line transport services.

"Act" means the Communications Act of 1934 (47 U.S.C. Section 151 et seq.), as amended by the Telecommunications Act of 1996, and as from time to time interpreted in the duly authorized rules and regulations of the FCC or by the Commission.

"ADSL" or "Asymmetrical Digital Subscriber Line" means a transmission technology which transmits an asymmetrical digital signal using one of several transmission methods (for example, carrier-less AM/PM discrete multi-tone, or discrete wavelet multi-tone).

"Affiliate" is an entity, as defined in the Act, that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control with, another entity. For the purposes of this Agreement, "own" or "control" means to own an equity interest (or equivalent) of at least ten percent (10%), or the right to control the business decisions, management and policy of another entity performing any of the obligations set forth in this Agreement.

"AIN" ("Advanced Intelligent Network") is a network functionality that permits specific conditions to be programmed into a switch which, when met, directs the switch to suspend call processing and to receive special instructions for further call handling instructions in order to enable carriers to offer advanced features and services.

"AIN Services" means architecture and configuration of the AIN Triggers within the SCP as developed and/or offered by U S WEST to its customers.

"ALI" (Automatic Location Identification) is a database developed for E911 systems that provides for a visual display of the caller's telephone number and address, and the names of the emergency response agencies responsible for that address. The ALI also shows an Interim Number Portability (INP) number, if applicable.

"ALI/DMS" (Automatic Location Identification/Data Management System) means the emergency service (E911/911) database containing subscriber location information (including name, address, telephone number, and sometimes special information from the local service provider) used to determine to which Public Safety Answering Point (PSAP) to route the call.

"AMA" means the Automated Message Accounting structure that initially records telecommunication message information. AMA format is contained in the Automated Message Accounting document, published by Bellcore as GR-1100-CORE, which defines the industry standard for message recording.

"Ancillary Services" or "Ancillary Functions" means, collectively, the following: (I) Collocation as described in Section 40; (2) access to poles, ducts, conduits and rights of way as described in Section 47; (3) unused transmission media as described in Section 51; (4) Directory Listings as described in Section 44; (5) E911 as described in Section 50.1; (6) Directory Assistance Service as described in Section 50.2; (7) Operator Services as described in Section 50.3; (8) Directory Assistance and Listings services requests as described in Section 50.4; and (9) directory assistance data as described in Section 50.5.

"ANI" (Automatic Number Identification) is a feature that identifies and displays the number of a telephone that originates a call.

"ARS" (Automatic Route Selection) is a service feature that provides for automatic selection of the least expensive or most appropriate transmission facility for each call based on criteria programmed into the system.

"ASR" (Access Service Request) means the industry standard forms and supporting documentation used for ordering Access Services. The ASR may be used to order trunking and facilities between AT&T and USWEST for Local Interconnection.

"AT&T" means AT&T Communications of the Mountain States, Inc. and any Affiliates, subsidiary companies or other entities performing any of the obligations of AT&T set forth in this Agreement.

7/18/97

"BLV/BLI" (Busy Line Verify/Busy Line Interrupt) means an operator call in which the end user inquires as to the busy status of, or requests an interruption of, a telephone call.

"Business Day" means any day Monday through Friday except for mutually agreed to holidays.

"CABS" means the Carrier Access Billing System which is defined in a document prepared by the Billing Committee of the OBF. The Carrier Access Billing System document is published by Bellcore in Volumes 1, 1A, 2, 3, 3A, 4 and 5 as Special Reports SR-OPT-001868, SR-OPT-0011869, SR-OPT-001871, SR-OPT-001872, SR-OPT-001873, SR-OPT-001874, and SR-OPT-001875, respectively, and contains the recommended guidelines for the billing of access and other connectivity services.

"Calling Party Number" or "CPN" is a CCS parameter which refers to the number transmitted through a network identifying the calling party.

"CCS" (Common Channel Signaling) means a method of digitally transmitting call set-up and network control data over a digital signaling network fully separate from the public switched telephone network that carries the actual call.

"Central Office Switch" means a switch used to provide Telecommunications Services, including, but not limited to:

- "End Office Switches" which are used to terminate Customer station loops for the purpose of interconnecting to each other and to trunks;
- (b) "Tandem Office Switches" which are used to connect and switch trunk circuits between and among other Central Office Switches. Access tandems provide connections for exchange access and toll traffic while local tandems provide connections for local/EAS traffic; or
- (c) Combination End Office/Tandem Office Switches.

"Centrex", including Centrex Plus, means a Telecommunications Service that uses central office switching equipment for call routing to handle direct dialing of calls and to provide numerous private branch exchange-like features.

"Charge Number" is a CCS parameter which refers to the number transmitted through the network identifying the billing number of the calling party.

"CLASS" (Bellcore Service Mark) is a set of call-management service features that utilize the capability to forward a calling party's number between end offices as part of call setup. Features include Automatic Callback, Automatic Recall, Caller ID, Call Trace, and Distinctive Ringing.

"Combinations" means provision by US WEST of two or more connected Network Elements ordered by AT&T to provide its Telecommunication Services in a geographic area or to a specific subscriber and that are placed on the same or related order by AT&T, subject to restrictions, if any, imposed by the Commission.

"Commission" means the Arizona Corporation Commission.

"Competitive Local Exchange Carrier" or "CLEC" means an entity authorized to provide Local Exchange Service that does not otherwise qualify as an incumbent LEC.

"Conduit" means a tube or protected pathway that may be used to house communication or electrical cables. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more innerducts.

"Confidential Information" has the meaning set forth in Section 28 of Part A of this Agreement.

"Contract Year" means a twelve (12) month period during the term of this Agreement commencing on the Effective Date and each anniversary thereof.

"Control Office" is an exchange carrier center or office designated as its company's single point of contact for the provisioning and maintenance of its portion of local interconnection arrangements.

"Custom Calling Features" is a set of call-management service features available to residential and business subscribers including call-waiting, call-forwarding and three-party calling.

"Customer" means a third-party (residence or business) that subscribes to Telecommunications Services provided by either of the Parties.

\*DBMS" (Database Management System) is a computer system used to store, sort, manipulate and update the data required to provide, for example, selective routing and ALI.

"Databases" are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System, and AIN.

"Digital Signal Level" means one of several transmission rates in the time division multiplexing hierarchy, including, but not limited to:

"Digital Signal Level 0" or "DS-0" means the 56 or 64 Kbps zero-level signal in the time-division multiplex hierarchy.

"Digital Signal Level 1"" or "DS-1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-1 is the initial level of multiplexing.

"Digital Signal Level 3" or "DS-3" means the 44.736 Mbps third-level in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-3 is defined as the third level of multiplexing.

"Directory Assistance Database" refers to any set of subscriber records used by U S WEST in its provision of live or automated operator-assisted directory assistance including, but not limited to, 411, 555-1212, NPA-555-1212.

"Directory Assistance Service" provides Listings to callers. Directory Assistance Service may include the option to complete the call at the caller's direction.

"Directory Listings" or "Listings" refers to subscriber information, including, but not limited to, name, address and phone numbers, in Directory Assistance Service or directory products.

"Discloser" means that Party to this Agreement which has disclosed Confidential Information to the other Party.

"E911" (Enhanced 911 Service) means a telephone communication service which will automatically route a call dialed "911" to a designated Public Safety Answering Point (PSAP) attendant and will provide to the attendant the calling party's telephone number and, when possible, the address from which the call is being placed, and the emergency response agencies responsible for the location from which the call was dialed.

"E911 Message Trunk" is a dedicated line, trunk or channel between two central offices or switching devices which provides a voice and signaling path for E911 calls.

"Extended Area Service" ("EAS") is intraLATA traffic treated as "local" traffic between exchanges (rather than as "toll" traffic) as established by the Commission and as reflected in the effective U S WEST tariffs.

"Effective Date" is the date, indicated in the Preamble, on which this Agreement shall become effective.

"Emergency Response Agency" is a governmental entity authorized to respond to requests from the public to meet emergencies.

"EMR" means the Exchange Message Record System used among LECs for exchanging telecommunications message information for billable, non-billable, sample, settlement and study data. EMR format is contained in BR-010-200-010 CRIS Exchange Message Record, published by Bellcore, which defines the industry standard for exchange message records.

"ESN" (Emergency Service Number) is a number assigned to the ALI and selective routing databases for all subscriber telephone numbers. The ESN designates a unique combination of fire, police and emergency medical service response agencies that serve the address location of each in-service telephone number.

"FCC" means the Federal Communications Commission.

"FCC Interconnection Order" is the Federal Communications Commission's First Report and Order in CC Docket No. 96-98 released August 8, 1996, as effective.

"Fiber-Meet" means an interconnection architecture method whereby the Parties physically interconnect their networks via an optical fiber interface (as opposed to an electrical interface) at a mutually agreed upon location.

"Gateway" (ALI Gateway) is a telephone company computer facility that interfaces with AT&T's 911 administrative site to receive Automatic Location Identification (ALI) data from AT&T. Access to the Gateway will be via a dial-up modern using a common protocol.

"HDSL" or "High-Bit Rate Digital Subscriber Line" means a two-wire or four-wire transmission technology which typically transmits a DS-1-level signal (or, higher level signals with certain technologies), using, for example, 2 Binary/1 Quartenary ("2B1Q").

"ILEC" means the incumbent local exchange carrier.

"Information Service Traffic" means traffic which originates on a local access line and which is addressed to an information service provider.

"INP" (Interim Number Portability) is a service arrangement whereby subscribers who change local service providers may retain existing telephone numbers with minimal impairment of quality, reliability, or convenience when remaining at their current location or changing their location within the geographic area served by the initial carrier's serving central office.

"Integrated Digital Loop Carrier" ("IDLC") means a digital subscriber loop carrier system which interfaces with the switch digitally at a DS-1 (1.544Mbps) or higher level.

"Integrated Services Digital Network" or "ISDN" means a switched network service that provides end-to-end digital connectivity for the simultaneous transmission of voice and data. Basic Rate Interface-ISDN (BRI-ISDN) provides for a digital transmission of two 64 Kbps bearer channels and one 16 Kbps data channel (2B+D). Primary Rate Interface-ISDN (PRI-ISDN) provides for a digital transmission of twenty-three (23) 64 Kbps bearer channels and one 64 Kbps data channel (23B+D).

"Interconnection" is as described in the Act and refers to the connection of separate pieces of equipment, facilities, or platforms between or within networks for the purpose of transmission and routing of telephone exchange service traffic and exchange access traffic.

"IXC" (Interexchange Carrier) means a provider of interexchange Telecommunications Services.

"LATA" means Local Access Transport Area.

"LEC" means local exchange carrier.

"LIDB" (Line Information Data Base(s)) is a SCP database that provides for such functions as calling card validation for telephone line number cards issued by LECs and other entities and validation for collect and billed-to-third services.

"Local Interconnection" shall have the meaning set forth in the Recitals to this Agreement.

"Local Resale," "Services for Resale" or "Resale Services" means, collectively, Telecommunications Services and service functions provided by U S WEST to AT&T pursuant to Attachment 2 of this Agreement.

"Local Traffic" is intraLATA traffic within an exchange that is treated as toll free traffic as established by the Commission and as reflected in the effective tariffs of U S WEST.

"Loop" is a transmission facility between a distribution frame, or its equivalent, in a U S WEST central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which AT&T is granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

Loop Concentrator/Multiplexer Loop Feeder Network Interface Device (NID) Distribution

"Main Distribution Frame" or "MDF" means the distribution frame of the Party providing the Loop used to interconnect cable pairs and line and trunk equipment terminals on a switching system or transmission facility.

"MECAB" refers to the Multiple Exchange Carrier Access Billing (MECAB) document prepared by the Billing Committee of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECAB document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of an Access Service provided by two or more LECs (including a LEC and a CLEC), or by one LEC in two or more states within a single LATA.

"MECOD" refers to the Multiple Exchange Carriers Ordering and Design (MECOD) Guidelines for Access Services - Industry Support Interface, a document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECOD document, published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for Access Service which is to be provided by two or more LECs (including a LEC and a CLEC). It is published by Bellcore as SRBDS 00983.

"Meet-Point Billing" or "MPB" refers to an arrangement whereby two LECs (including a LEC and AT&T) jointly provide Switched Access Service to an Interexchange Carrier, with each LEC (or AT&T) receiving an appropriate share of the access element revenues.

"Mid-Span Meet" is a point of interconnection between two networks, designated by two Telecommunications Carriers, at which one carrier's responsibility for service begins and the other carrier's responsibility ends.

"MSAG" (Master Street Address Guide) is a database defining the geographic area of an E911 service. It includes an alphabetical list of the street names, high-low house number ranges, community names, and emergency service numbers provided by the counties or their agents to U S WEST.

"North American Numbering Plan" or "NANP" means the numbering plan used in the United States that also serves Canada, Bermuda, Puerto Rico and certain Caribbean Islands. The NANP format is a 10-digit number that consists of a 3-digit NPA code (commonly referred to as the area code), followed by a 3-digit NXX code and 4-digit line number.

"NENA" (National Emergency Number Association) is an association with a mission to foster the technological advancement, availability and implementation of 911 nationwide.

"Network Element" means a facility or equipment used in the provision of a Telecommunications Service including all features, functions and capabilities embedded in such facility or equipment.<sup>1</sup>

"NP" (Number Portability) means the use of the Location Routing Number (LRN) database solution to provide fully transparent NP for all subscribers and all providers without limitation.

"NPA" (Numbering Plan Area) (sometimes referred to as an area code) is the three digit indicator which is designated by the first three digits of each 10-digit telephone number within the NANP. Each NPA contains 792 possible NXX Codes. There are two general categories of NPA, "geographic NPAs" and "Non-Geographic NPAs." A "Geographic NPA" is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that geographic area. A "Non-Geographic NPA," also known as a "Service Access Code (SAC Code)" is typically associated with a specialized Telecommunications Service which may be provided across multiple geographic NPA areas; 500, 800, 900, 700, and 888 are examples of Non-Geographic NPAs.

AT&T Order, page 11, Issue 18 and MCIm Order at p. 24.

"NXX" means the fourth, fifth and sixth digits of a ten-digit telephone number within the North American Numbering Plan.

"OBF" means the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS).

"Operator Services" includes, but is not limited to, (1) operator handling for call completion (e.g., collect calls); (2) operator or automated assistance for billing after the subscriber has dialed the called number (e.g., credit card calls); and (3) special services (e.g., BLV/BLI, emergency agency call).

"Operator Systems" is the Network Element that provides operator and automated call handling with billing, special services, subscriber telephone listings, and optional call completion services.

"P.01 Transmission Grade of Service (GOS)" means a trunk facility provisioning standard with the statistical probability of no more than one call in 100 blocked on initial attempt during the average busy hour.

"PLU" (Percent Local Usage) is a calculation which represents the ratio of the local minutes to the sum of local and intraLATA toll minutes between exchange carriers sent over Local Interconnection trunks. Directory assistance, BLV/BLI, 900, 976, transiting calls from other exchange carriers and switched access calls are not included in the calculation of PLU.

"Party" means either U S WEST or AT&T and "Parties" means U S WEST and AT&T.

"Person" means, collectively, an Affiliate, subsidiary, Customer, end user and subscriber of US WEST.

"Point of Interconnection" or "POI" means the physical point that establishes the technical interface, the test point, where applicable, and the operational responsibility hand-off between AT&T and USWEST for the local interconnection of their networks for the mutual exchange of traffic.

"Point of Interface" is the physical point where AT&T hands off transmission media to the USWEST provided entrance facility associated with a collocation arrangement for the purpose of connecting the entrance facility to some point located within USWEST's premises.

"Pole Attachment" means the connection of a facility to a utility pole. Some examples of facilities are mechanical hardware, grounding and transmission cable, and equipment boxes.

"POP" means an IXC's point of presence.

"Port" means a termination on a Central Office Switch that permits Customers to send or receive Telecommunications Services over the public switched network, including switch features or switching functionality.<sup>2</sup>

"Premium Listing", such as additional, foreign, cross reference, informational, non-listed, privacy, etc. are as described in the U S WEST general exchange Listing tariff.

"Primary Listing" (for example, main list, additional main, joint user, client main list or answering service list) shall mean the one appearance of an end user telephone subscriber's main telephone number and other

AT&T Order, page 11, Issue 18 and MCIm Order at p. 24.

content such as name and address, which each AT&T residence or business subscriber is entitled to receive in the white pages directory published by U S WEST Dex at no charge from U S WEST Communications. Where U S WEST business end users are entitled to receive a courtesy Listing in the yellow pages section of any directory published on U S WEST's behalf, AT&T's business customers will receive the same entitlement.

"Proprietary Information" shall have the same meaning as Confidential Information.

"PSAP" (Public Safety Answering Point) is the public safety communications center where 911 calls placed by the public for a specific geographic area will be answered.

"Rate Center" means the geographic point and corresponding geographic area which are associated with one or more particular NPA-NXX codes which have been assigned to U S WEST or AT&T for its provision of basic exchange Telecommunications Services. The "Rate Center Point" is the finite geographic point identified by a specific V&H coordinate, which is used to measure distance-sensitive end user traffic to/from the particular NPA-NXX designations associated with the specific Rate Center. The "Rate Center Area" is the exclusive geographic area identified as the area within which U S WEST or AT&T will provide basic exchange Telecommunications Services bearing the particular NPA-NXX designations associated with the specific Rate Center. The Rate Center Point must be located within the Rate Center Area.

"Rating Point" means the point at which transport mileage is calculated for the termination of calls. Each Party shall establish its own Rating Point(s) for its own services.

"Real Time" means the actual time in which an event takes place, with the reporting on or the recording of the event simultaneous with its occurrence.

"Recipient" means that Party to this Agreement (1) to which Confidential Information has been disclosed by the other Party, or (2) who has obtained Confidential Information in the course of providing services under this Agreement.

"Reseller" is a category of Telecommunications Services providers who obtain Telecommunications Services from another provider through the purchase of wholesale priced services for resale to their end user subscribers.

"Routing Point" means a location which U S WEST or AT&T has designated on its own network as the homing (routing) point for traffic inbound to basic exchange Telecommunications Services provided by U S WEST or AT&T which bear a certain NPA-NXX designation. The Routing Point is employed to calculate mileage measurements for the distance-sensitive transport element charges of Switched Access Services. Pursuant to Bellcore Practice BR 795-100-100, the Routing Point may be an "End Office" location, or a "LEC Consortium Point of Interconnection." Pursuant to that same Bellcore Practice, examples of the latter shall be designated by a common language location identifier (CLLI) code with (x)KD in positions 9, 10, 11, where (x) may by any alphanumenic A-Z or 0-9. The Routing Point need not be the same as the Rate Center Point, nor must it be located within the Rate Center Area, but must be in the same LATA as the NPA-NXX.

"ROW" (Right of Way) means the right to use the land or other property owned, leased, or controlled by another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and may include the right to use discrete space in buildings, building complexes or other locations.

"SAG" (Street Address Guide) is a database containing an alphabetical list of street names, high-low house number ranges, descriptive addresses, community names, tax codes, subscriber names, telephone numbers, NXXs, central office names, CLLI and other information maintained by U S WEST.

"SECAB" means the Small Exchange Carrier Access Billing document prepared by the Billing Committee of the OBF. The Small Exchange Carrier Access Billing document, published by Bellcore as Special Report SR OPT-001856, contains the recommended guidelines for the billing of access and other connectivity services.

"Selective Routing" is a service which automatically routes an E911 call to the PSAP that has jurisdictional responsibility for the service address of the telephone from which 911 is dialed, irrespective of telephone company exchange or wire center boundaries.

"Service Control Point" or "SCP" is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., a toll free database stores subscriber record data that provides information necessary to route toll free calls).

"Signaling Transfer Points" or "STPs" provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and Signaling Transfer Points.

"Switch" - See Central Office Switch.

"Switched Access", "Switched Access Service", "Switched Exchange Access Service" or "Switched Access Traffic" are as defined in the Parties' applicable tariffs.

"Tandem Office Switches" are Class 4 switches which are used to connect and switch trunk circuits between and among End Office Switches and other tandems.

"Tariff Services" as used throughout this Agreement refers to the applicable Party's interstate tariffs and state tariffs, price lists, price schedules and catalogs.

"Technically Feasible" refers solely to technical or operational concerns, rather than economic, space, or site considerations, in accordance with the rules and regulations of the FCC and the Commission.

"Telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

"Telecommunications Carrier" means any provider of Telecommunications Services, except that such term does not include aggregators of Telecommunications Services (as defined in Section 226 of the Act). A Telecommunications Carrier shall be treated as a common carrier under the Act only to the extent that it is engaged in providing Telecommunications Services, except that the Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.

"Telecommunications Services" means the offering of Telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

"Toll Traffic" is traffic that originates in one Rate Center and terminates in another Rate Center with the exception of traffic that is rated as EAS.

"Transit Service" provides the ability for a Telecommunications Carrier to use its connection to a local or access tandem for delivery of calls that originate with a Telecommunications Carrier and terminate to a company other than the tandem company, such as another Competitive Local Exchange Carrier, an existing LEC, or a wireless carrier. In these cases, neither the originating nor terminating end user is a customer of the tandem Telecommunications Carrier. The tandem Telecommunications Carrier will accept traffic originated by a Party and will terminate it at a Point of Interconnection with another local, intraLATA or interLATA network Telecommunications Carrier. This service is provided through local and access tandem switches.

"Transit Traffic" is any traffic, other than Switched Access Traffic, that originates from one Telecommunications Carrier's network, transits another Telecommunications Carrier's network, and terminates to yet another Telecommunications Carrier's network.

"TRCO" means Trouble Reporting Control Office.

"US WEST" means US WEST Communications, Inc. and any Affiliates, subsidiary companies or other entities performing any of the obligations of US WEST set forth in this Agreement.

"Voluntary Federal Subscriber Financial Assistance Programs" are Telecommunications Services provided to low-income subscribers, pursuant to requirements established by the appropriate federal or state regulatory body.

"Wire Center" denotes, for the purposes of collocation, a building or space within a building, that serves as an aggregation point on a given carrier's network, where transmission facilities and circuits are connected or switched. Wire Center can also denote a building where one or more central offices, used for the provision of Telecommunications Services and Access Services, are located. Wire Center shall mean those points eligible for such connections as specified in the FCC Docket No. 91-141, and rules adopted pursuant thereto.

# **TERMS AND CONDITIONS**

## 1. General Provisions

- 1.1 Each Party is individually responsible to provide facilities within its network which are necessary for routing, transporting, measuring, and billing traffic from the other Party's network and for delivering such traffic to the other Party's network in the standard format compatible with AT&T's network and to terminate the traffic it receives in that standard format or the proper address on its network. The Parties are each solely responsible for participation in and compliance with national network plans, including the National Network Security Plan and the Emergency Preparedness Plan.
- 1.2 Neither Party shall impair the quality of service to other carriers or to either Party's Customers, and each Party may discontinue or refuse service if the other Party violates this provision. Upon such violation, either Party shall provide the other Party notice of such violation, at the earliest practicable time.
- 1.3 Each Party is solely responsible for the services it provides to its Customers and to other Telecommunications Carriers.
  - 1.3.1 The Parties recognize that equipment vendors may manufacture telecommunications equipment that does not fully incorporate and may deviate from industry standards referenced in this Agreement. Due to the manner in which

individual equipment manufacturers have chosen to implement industry standards into the design of their products, along with differing vintages of individual facility components and the presence of embedded technologies pre-dating current technical standards, some of the individual facility components deployed within USWEST's network, including, without limitation, Network Elements and associated business processes and the standards associated with the equipment providing such Network Elements (collectively, "Network Components"), may not adhere to all the specifications set forth and described in the Bellcore, ANSI, ITU and other technical and performance standards outlined in this Agreement. Withinforty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which U S WEST will inform AT&T of deviations or planned deviations, and the implementation date of such planned deviations, from standards referenced in this Agreement for Network Components that may be ordered by AT&T. In addition, the Parties agree that those deviations from such standards documented by USWEST to AT&T shall, to the extent permitted by FCC and Commission rules and regulations, supersede sections of this Agreement referencing technical standards otherwise applicable for the affected Network Elements.

- USWEST agrees that in no event shall it intentionally allow any Network 1.3.2 Component provided by USWEST to AT&T under this Agreement to perform below the standards or deviations therefrom reflected in Section 1.3.1, except where requested by AT&T. USWEST shall minimize any degradation to its equipment relative to currently applicable service, where reasonable in view of industry adopted performance standards and technological developments. Written notice (the "Change Notice") of any planned changes in standards for any Network Component which could impact that Network Component will be provided at least ninety (90) days (or at the make/buy point) prior to the planned implementation. If AT&T notifies USWEST of how the proposed change may adversely impact AT&T or its Customers within fourteen (14) calendar days after receipt of US WEST's Change Notice, US WEST and AT&T will schedule joint discussions to address and attempt to resolve the matter, including, without limitation, consideration of proposed alternatives. In addition, if U S WEST learns that any Network Component purchased by AT&T under this Agreement has been permitted (even if not intentionally) to fall materially below the level or specification in effect as of the Effective Date of this Agreement, USWEST shall inform AT&T immediately.
- 1.3.3 The Parties recognize that providing a number of the services specified in this Agreement depends upon the "technical feasibility" of providing that service, as that term is defined under the Act and/or by FCC or Commission rules and decisions. If the Parties cannot agree on whether providing a service is technically feasible, the matter, including cost and expenses (if any), shall be resolved through good faith negotiation or the dispute resolution process outlined in this Agreement.

#### Most Favored Nation Terms and Treatment

2.1 Until such time as there is a final court determination interpreting Section 252(i) of the Act, U S WEST shall make available to AT&T the terms and conditions of any other agreement for Interconnection, unbundled Network Elements and resale services approved by the Commission under Section 252 of the Act, in that

agreement's entirety. After there is a final court determination interpreting Section 252(i) of the Act, the Parties agree to revise this Section 2.1 to reflect such interpretation.<sup>3</sup>

# 3. Payment

- 3.1 In consideration of the services provided by U S WEST under this Agreement, AT&T shall pay the charges set forth in Attachment 1 to this Agreement. The billing procedures for charges incurred by AT&T hereunder are set forth in Attachment 5 to this Agreement.
- 3.2 Amounts payable under this Agreement, unless reasonably disputed, are due and payable within thirty (30) days after the date of U S WEST's invoice or within twenty (20) days after receipt of the invoice, whichever is later. If the payment due date is not a Business Day, the payment shall be made the next Business Day.
- 3.3 A late payment charge of 1.5% applies to all billed balances, not reasonably disputed, which are not paid within the applicable time period set forth in Section 3.2 above. To the extent AT&T pays the billed balance on time, but the amount of the billed balance is reasonably disputed by AT&T, and, it is later determined that a refund is due AT&T, interest shall be payable on the refunded amount in the amount of 1.5% per month. To the extent AT&T pays the billed balance on time, but the amount of the billed balance is reasonably disputed by AT&T, and, it is later determined that no refund is due AT&T, no interest shall be payable on the disputed amount.
- 3.4 Late payment charges shall not be used as a "credit" to a deposit, if any, without the express approval of U S WEST.
- 3.5 Unless specified otherwise in this Agreement, U S WEST shall bill all amounts due from AT&T for each resold service in accordance with the terms and conditions as specified in the U S WEST tariff.

#### 4. Taxes

Any federal, state or local excise, sales, or use taxes (excluding any taxes levied on income) resulting from the performance of this Agreement shall be borne by the Party upon which the obligation for payment is imposed under applicable law, even if the obligation to collect and remit such taxes is placed upon the other Party. Any such taxes shall be shown as separate items on applicable billing documents between the Parties. The Party so obligated to pay any such taxes may contest the same in good faith, at its own expense, and shall be entitled to the benefit of any refund or recovery, provided that such Party shall not permit any lien to exist on any asset of the other Party by reason of the contest. The Party obligated to collect and remit taxes shall cooperate fully in any such contest by the other Party by providing records, testimony and such additional information or assistance as may reasonably be necessary to pursue the contest. To the extent a sale is claimed to be for resale tax exemption, the purchasing Party shall furnish the providing Party a proper resale tax exemption certificate as authorized or required by statute or regulation by the jurisdiction providing said resale tax exemption. Failure to timely provide said resale tax exemption

MCIm Order, p. 29 and AT&T Order, p. 35.

certificate will result in no exemption being available to the purchasing Party during the applicable reporting period.

# 5. Intellectual Property

- 5.1 Obligations of Party Requesting Access. As a condition to the access or use of patents, copyright, trade secrets, and other intellectual property (including software) owned or controlled by a third party to the extent necessary to implement this Agreement or specifically required by the then applicable federal and state rules and regulations relating to Interconnection and access to telecommunications facilities and services ("Third Party Intellectual Property"), the Party providing access may require the other, upon written notice from time to time, to obtain a license or permission for such access or use of Third Party Intellectual Property, make all payment, if any, in connection with obtaining such license, and provide evidence of such license.
- 5.2 Obligations of Party Providing Access. The Party providing access shall provide a list of all known and necessary Third Party Intellectual Property applicable to the other Party, and take all necessary and appropriate steps to facilitate the negotiation of any mandatory licenses. The treatment of third party licenses shall be in accordance with FCC rules and regulations and/or judicial determinations.
- Any intellectual property jointly developed in the course of performing this Agreement shall belong to both Parties who shall have the right to grant non-exclusive licenses to third parties except as otherwise designated in writing by one Party to another. Any intellectual property which originates from or is developed by a Party shall remain in the exclusive ownership of that Party. Except for a limited license to use patents or copyrights to the extent necessary for the Parties to use any facilities or equipment (including software) or to receive any service solely as provided under this Agreement, no license in patent, copyright, trademark or trade secret, or other proprietary or intellectual property presently or hereafter owned, controlled or licensable by a Party, is granted to the other Party or shall be implied or arise by estoppel.

# 6. Severability

6.1 In the event that any one or more of the provisions contained herein shall for any reason be held to be unenforceable or invalid in any respect under law or regulation, the Parties will negotiate in good faith for replacement language. If any part of this Agreement is held to be invalid or unenforceable for any reason, such invalidity or unenforceability will affect only the portion of this Agreement which is invalid or unenforceable. In all other respects this Agreement will stand as if such invalid or unenforceable provision had not been a part hereof, and the remainder of this Agreement shall remain in full force and effect.

# 7. Responsibility for Environmental Contamination

7.1 AT&T shall in no event be liable to U S WEST for any costs whatsoever resulting from the presence or release of any environmental hazard AT&T did not introduce to the affected work location. U S WEST shall, at AT&T's request, indemnify, defend, and hold harmless AT&T, and each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) arising out of or resulting from (a) any environmental hazard U S WEST, its contractors or agents introduce to the work location, or (b) the presence or

release of any environmental hazard for which USWEST is responsible under applicable law.

- 7.2 US WEST shall in no event be liable to AT&T for any costs whatsoever resulting from the presence or release of any environmental hazard US WEST did not introduce to the affected work location. AT&T shall, at US WEST's request, indemnify, defend, and hold harmless US WEST, and each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) arising out of or resulting from (a) any environmental hazard AT&T, its contractors or agents introduce to the work location, or (b) the presence of release of any environmental hazard for which AT&T is responsible under applicable law.
- 7.3 In the event any suspect materials within U S WEST-owned, operated or leased facilities are identified to be asbestos-containing, AT&T will ensure that, to the extent any activities which it undertakes in the facility disturb such suspect materials, such AT&T activities will be in accordance with applicable local, state and federal environmental and health and safety statutes and regulations. Except for abatement activities undertaken by AT&T or equipment placement activities that result in the generation of asbestos containing material, AT&T shall not have any responsibility for managing, nor be the owner of, not have any liability for, or in connection with, any asbestos containing material. U S WEST agrees to immediately notify AT&T if U S WEST undertakes any asbestos control or asbestos abatement activities that potentially could affect AT&T equipment or operations, including, but not limited to, contamination of equipment.
- 7.4 Each Party will be solely responsible, at its own expense, for proper handling, storing, transport and disposal of all (a) substances or materials that it or its contractors or agents bring to, create or assume control over at work locations, or (b) waste resulting therefrom or otherwise generated in connection with its or its contractors' or agents' activities at the work locations.

## Branding

- 8.1<sup>4</sup> Except as provided in this Agreement, at AT&T's request, U S WEST shall be obligated to provide branding and unbranding of services provided to AT&T Customers pursuant to this Agreement in a nondiscriminatory manner consistent with the branding of such services to U S WEST Customers.
- 8.2<sup>5</sup> If AT&T requests that a service provided under this Agreement be branded as an AT&T service and U S WEST informs AT&T that such branding is not available or if it is not practical to so brand the service, then U S WEST will offer AT&T the service on an unbranded basis at AT&T's request.
- 8.3<sup>6</sup> Without limitation of the provisions of Section 8.1 and 8.2, if U S WEST is offering a service on an unbranded basis, U S WEST may brand such service with the

Arizona Bench Order, May 29, 1997 Hearing, pp. 1582-3; Procedural Order, July 14, 1997 at page 2-3.

id.

ld.

U S WEST brand only if U S WEST also offers to brand the service with the AT&T brand.

- 8.4 [Intentionally left blank for numbering consistency]
- 8.5.7 U S WEST will not be required to rebrand uniforms and vehicles. The uniforms of U S WEST's repair and maintenance personnel shall bear the same or less U S WEST branding than was present as of February 8, 1996.
- 8.6 Computerized Programming
  - 8.6.1 Repair bills or receipts handed to the end user at the time service is rendered may bear the US WEST brand. If the computerized programming which either informs the repair employees of the address and service needed, or prints the receipts, can be modified, at a reasonable cost, to use the brand of a selection of AT&T, then US WEST shall provide that customized programming. Otherwise, the receipt may bear the brand of US WEST's repair and maintenance, and will add that it provides authorized repair and maintenance for, and list the CLECs for which US WEST is contracted to provide service. If US WEST's computerized programming can be modified to inform US WEST's employee for which CLEC service is being rendered, the repair employee may be required to circle or otherwise indicate the name of the appropriate CLEC on the receipt or other form.
  - 8.6.2 If U S WEST chooses to use its logo on the above forms, it may only do so if it also uses the logos of the CLECs. If U S WEST's Customers are served by its own repair and maintenance, U S WEST's name should be listed with the other CLECs.
  - 8.6.3 Typeface, font, and appearances of the names, size and appearance of the logos of the CLECs and U S WEST in all locations must be the same.
  - 8.6.4 U S WEST will not be held liable for any unintentional errors that occur in the branding process.
  - 8.6.5 The foregoing steps to rebrand repair and maintenance service need only be taken by U S WEST where technically feasible.
- 8.7 U S WEST shall provide, for AT&T's review, the methods and procedures, training and approaches to be used by U S WEST to assure that U S WEST meets AT&T's branding requirements.
- 8.8 This Section 8 shall confer on U S WEST no rights to the service marks, trademarks and trade names owned by or used in connection with services by AT&T or its Affiliates, except as expressly permitted by AT&T.

Bolded language in Sections 8.5 and 8.6 included per MCIm Order, pp. 13-14 at Issue 23 and AT&T Order at Issue 30.

- 8.9 At the request of AT&T and where technically feasible, US WEST will rebrand operator services and directory assistance in AT&T's name.8
- 8.10 The expense of rebranding operator services and directory assistance, if required by AT&T, shall be included as a forward looking economic cost, such cost to be resolved in the future arbitration to be conducted by the Commission as it considers cost studies.9

# 9. Independent Contractor Status

- 9.1 Nothing contained herein shall constitute the Parties as joint venturers, partners, employees or agents of one another, and neither Party shall have the right or power to bind or obligate the other.
- 9.2 Each Party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance or its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of all employees assisting in the performance of such obligations. Each Party will be solely responsible for all matters relating to payment of such employees, including compliance with social security taxes, withholding taxes, and other payroll taxes with respect to their respective employees, as well as any taxes, contributions or other obligations imposed by applicable state unemployment or workers' compensation acts and all other regulations governing such matters. Each Party has sole authority and responsibility to hire, fire and otherwise control its employees.
- 9.3 Subject to the limitations on liability and except as otherwise provided in this Agreement, each Party shall be responsible for (a) its own acts and performance of all obligations imposed by applicable law in connection with its activities, legal status and property, real or personal, and (b) the acts of its own Affiliates, employees, agents and contractors during the performance of that Party's obligations hereunder. Except for provisions herein expressly authorizing one Party to act for the other, nothing in this Agreement shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this Agreement, neither Party shall undertake to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

#### 10. Referenced Documents

All references to Sections, Exhibits, and Schedules shall be deemed to be references to Sections of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. Whenever any provision of this Agreement refers to a technical reference, technical publication, AT&T practice, USWEST practice, any publication of telecommunications industry administrative or technical standards, or any other document

AT&T Order, p. 31 at issue 62.

AT&T Order, p. 18 at Issue 30.

specifically incorporated into this Agreement, it will be deemed to be a reference to the most recent version or edition (including any amendments, supplements, addenda, or successors) or such document that is in effect, and will include the most recent version or edition (including any amendments, supplements, addenda, or successors) of each document incorporated by reference in such a technical reference, technical publication, AT&T practice, U S WEST practice, or publication of industry standards, unless AT&T elects otherwise.

# 11. Publicity and Advertising

11.1 Neither Party shall publish or use any advertising, sales promotions or other publicity materials that use the other Party's logo, trademarks or service marks without the prior written approval of the other Party.

## 12. Executed in Counterparts

12.1 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but such counterparts shall together constitute one and the same instrument.

## 13. Headings Not Controlling

13.1 The headings and numbering of Sections, Parts, Appendices and Attachments in this Agreement are for convenience only and shall not be construed to define or limit any of the terms herein or affect the meaning or interpretation of this Agreement.

## 14. Joint Work Product

14.1 This Agreement is the joint work product of the Parties and has been negotiated by the Parties and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against either Party.

#### 15. Survival

Any liabilities or obligations of a Party for acts or omissions prior to the cancellation or termination of this Agreement; any obligation of a Party under the provisions regarding indemnification, confidential information, limitation of liability, and any other provisions of this Agreement which, by their terms, are contemplated to survive, or to be performed after, termination of this Agreement, shall survive cancellation or termination thereof.

# 16. Effective Date

16.1 This Agreement shall become effective pursuant to Sections 251 and 252 of the Act, on

## 17. Amendment of Agreement

17.1 Except as otherwise provided in this Agreement, no amendment or waiver of any provision of this Agreement, and no consent to any default under this Agreement, shall be effective

unless the same is in writing and signed by an officer of the Party against whom such amendment, waiver or consent is claimed. If either Party desires an amendment to this Agreement during the term of this Agreement, it shall provide written notice thereof to the other Party describing the nature of the requested amendment. If the Parties are unable to agree on the terms of the amendment within thirty (30) days after the initial request therefor, the Party requesting the amendment may invoke the dispute resolution process under Section 27 of this Part A of this Agreement to determine the terms of any amendment to this Agreement.

## 18. Indemnification

- Notwithstanding any limitations in remedies contained in this Agreement, each Party (the "Indemnifying Party") will indemnify and hold harmless the other Party ("Indemnified Party") from and against any loss, cost, claim, liability, damage and expense, including reasonable attorney's fees, to third parties, relating to or arising out of the libel, slander, invasion of privacy, misappropriation of a name or likeness, actual or alleged infringement or other violation or breach of any patent, copyright, trademark, service mark, trade name, trade dress, trade secret or any other intellectual property presently existing or later created. negligence or willful misconduct by the Indemnifying Party, its employees, agents, or contractors in the performance of this Agreement or the failure of the Indemnifying Party to perform its obligations under this Agreement. In addition, the Indemnifying Party will, to the extent of its obligations to indemnify hereunder, defend any action or suit brought by a third party against the Indemnified Party. If, after the Party providing access under this Agreement gives written notice to the other Party pursuant to Section 5.1, the other Party fails to obtain a license or permission for access or use of Third Party Intellectual Property, the Party providing access shall have no indemnification obligation hereunder for any loss, cost, claim, liability, damage and expense, including reasonable attorney's fees, to third parties, relating to or arising out of the failure of the other Party to obtain such license or permission. 10
- The Indemnified Party will notify the Indemnifying Party promptly in writing of any written claim, lawsuit, or demand by third parties for which the Indemnified Party alleges that the Indemnifying Party is responsible under this Section 18 and tender the defense of such claim, lawsuit or demand to the Indemnifying Party. Failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that the Indemnifying Party might have, except to the extent that such failure prejudices the Indemnifying Party's ability to defend such claim.
- 18.3 The Indemnified Party also will cooperate in every reasonable manner with the defense or settlement of such claim, demand, or lawsuit. The Indemnifying Party shall keep the Indemnified Party reasonably and timely apprised of the status of the claim, demand or lawsuit. The Indemnified Party shall have the right to retain its own counsel, including inhouse counsel, at its expense, and participate in but not direct the defense; provided, however, that if there are reasonable defenses in addition to those asserted by the Indemnifying Party, the Indemnified Party and its counsel may raise and direct such defenses, which shall be at the expense of the Indemnifying Party.

Procedural Order, July 14, 1997, pages 4-5.

The Indemnifying Party will not be liable under this Section 18 for settlements or compromises by the Indemnified Party of any claim, demand or lawsuit unless the Indemnifying Party has approved the settlement or compromise in advance or unless the defense of the claim, demand or lawsuit has been tendered to the Indemnifying Party in writing and the Indemnifying Party has failed to timely undertake the defense. In no event shall the Indemnifying Party settle or consent to any judgment pertaining to any such action without the prior written consent of the Indemnified Party.

# 19. Limitation of Liability

- 19.1 Except as otherwise provided in the indemnity section, no Party shall be liable to the other Party for any Loss, defect or equipment failure caused by the conduct of the other Party, the other Party's agents, servants, contractors or others acting in aid or concert with the other Party.
- 19.2 [Intentionally left blank for numbering consistency]
- 19.3 In no event shall either Party have any liability whatsoever to the other Party for any indirect, special, consequential, incidental or punitive damages, including, but not limited to, loss of anticipated profits or revenue or other economic loss in connection with or arising from anything said, omitted or done hereunder (collectively, "Consequential Damages"), even if the other Party has been advised of the possibility of such damages; provided, that the foregoing shall not limit a Party's obligation to indemnify, defend and hold the other Party harmless against any amounts payable to a third party, including any losses, costs, fines penalties, criminal or civil judgments or settlements, expenses (including attorneys' fees) and Consequential Damages of such third party. Nothing contained in this section shall limit either Party's liability to the other for (i) willful or intentional misconduct (including gross negligence); (ii) bodily injury, death or damage to tangible real or tangible personal property proximately caused by such party's negligent act or omission or that of their respective agents, subcontractors or employees, or (iii) under the circumstances presented to the arbitrator, the Commission or other decision maker, as the case may be pursuant to the dispute resolution process in Section 27, a pattern of conduct is found to exist by such arbitrator, the Commission or other decision maker in violation of a party's obligations under this Agreement that justifies an award of Consequential Damages, 11 nor shall anything contained in this section limit the Parties indemnification obligations, as specified above.
- 19.4 Notwithstanding the provisions of Section 19.3, to the extent that U S WEST tariffs contain limitations on liability, AT&T shall submit language for inclusion in its Intrastate retail tariffs, that is substantially similar to the limitation of liability language contained in U S WEST's tariffs, and such limitations of liability shall govern for Customer claims. In addition, notwithstanding the provisions of Section 19.3, to the extent that the Commission's quality of service rules provide for remedies to AT&T or its Customers for Customer claims, then those remedies shall govern as to such claims. 12

Procedural Order, July 14, 1997, page 5-6.

Arizona Bench Order, May 29, 1997 Hearing, p. 1610.

## 20. Term of Agreement

20.1 This Agreement shall be effective for a period of three (3) years, and thereafter shall continue in force and effect unless and until a new agreement, addressing all of the terms of this Agreement, becomes effective between the Parties. The Parties shall commence negotiations on a new agreement no later than one (1) year prior to the expiration of the term of this Agreement. Either Party may request resolution of open issues in accordance with the provisions of Section 27 of this Part A of this Agreement, Dispute Resolution, beginning nine (9) months prior to the expiration of this Agreement. Any disputes regarding the terms and conditions of the new interconnection agreement shall be resolved in accordance with said Section 27 of this Agreement and the resulting agreement shall be submitted to the Commission. This Agreement shall remain in effect until a new interconnection agreement approved by the Commission has become effective.

## 21. Governing Law

21.1 This Agreement shall be governed by and construed in accordance with the Act and the FCC's rules and regulations, except insofar as state law may control any aspect of this Agreement, in which case the domestic laws of the State of Arizona, without regard to its conflicts of laws principles, shall govern.

# 22. Cancellation Charges

22.1 Except as provided pursuant to a Bona Fide Request, or as otherwise provided in any applicable tariff or contract referenced herein, no cancellation charges shall apply.

## 23. Regulatory Approvals

- 23.1 This Agreement, and any amendment or modification hereof, will be submitted to the Commission for approval in accordance with Section 252 of the Act. In the event any governmental authority or agency rejects any provision hereof, the Parties shall negotiate promptly and in good faith such revisions as may reasonably be required to achieve approval.
- 23.2 U S WEST shall provide AT&T a summary describing the proposed change(s) to each Telecommunications Service which is available pursuant to this Agreement. U S WEST shall also provide AT&T a summary describing the proposed change(s) of each intrastate and interstate tariff which provides for an Interconnection, unbundled Network Element or Ancillary Service that is available pursuant to this Agreement. Such summaries shall be available through an internet Web page to be posted on the same day the proposed change is filed with the Commission or the FCC or at least thirty (30) days in advance of its effective date, whichever is earlier.
- 23.3 In the event any governmental authority or agency orders U S WEST to provide any service covered by this Agreement in accordance with any terms or conditions that individually differ from one or more corresponding terms or conditions of this Agreement, AT&T may elect to amend this Agreement to reflect any such differing terms or conditions contained in such decision or order, with effect from the date AT&T makes such election. The other services

- covered by this Agreement and not covered by such decision or order shall remain unaffected and shall remain in full force and effect.
- 23.4 The Parties intend that any additional services requested by either Party relating to the subject matter of this Agreement will be incorporated into this Agreement by amendment.

## 24. Compliance

- 24.1 Each Party shall comply with all applicable federal, state, and local laws, rules and regulations applicable to its performance under this Agreement.
- 24.2 Each Party represents and warrants that any equipment, facilities or services provided to the other Party under this Agreement comply with the Communications Law Enforcement Act of 1994 ("CALEA"). Each Party (the "Indemnifying Party") shall indemnify and hold the other Party (the "Indemnified Party") harmless from any and all penalties imposed upon the Indemnified Party for such noncompliance and shall, at the Indemnifying Party's sole cost and expense, modify or replace any equipment, facilities or services provided to the Indemnified Party under this Agreement to ensure that such equipment, facilities and services fully comply with CALEA.
- 24.3 All terms, conditions and operations under this Agreement shall be performed in accordance with all applicable laws, regulations and judicial or regulatory decisions of all duly constituted governmental authorities with appropriate jurisdiction, and this Agreement shall be implemented consistent with the FCC Interconnection Order and any applicable Commission orders. Each Party shall be responsible for obtaining and keeping in effect all FCC, Commission, franchise authority and other regulatory approvals that may be required in connection with the performance of its obligations under this Agreement. In the event the Act or FCC or Commission rules and regulations applicable to this Agreement are held invalid, this Agreement shall survive, and the Parties shall promptly renegotiate any provisions of this Agreement which, in the absence of such invalidated Act, rule or regulation, are insufficiently clear to be effectuated, violate, or are either required or not required by the new rule or regulation. During these negotiations, each Party will continue to provide the same services and elements to each other as are provided for under this Agreement, Provided, however, that either Party shall give ten (10) Business Days notice if it intents to cease any development of any new element or service that is not at that time being provided pursuant to this Agreement. In the event the Parties cannot agree on an amendment within thirty (30) days from the date any such rules, regulations or orders become effective, then the Parties shall resolve their dispute, including liability for noncompliance with the new clause or the cost, if any, of performing activities no longer required by the rule or regulation during the renegotiation of the new clause under the applicable procedures set forth in Section 27 herein.

## 25. Force Majeure

25.1 Neither Party shall be liable for any delay or failure in performance of any part of this Agreement from any cause beyond its control and without its fault or negligence including, without limitation, acts of nature, acts of civil or military authority, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, work stoppages, equipment failure, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities or acts or omissions of

transportation carriers. No delay or other failure to perform shall be excused pursuant to this Section 25 unless such delay or failure and the consequences thereof are beyond the control and without the fault or negligence of the Party claiming excusable delay or other failure to perform. In the event of any such excused delay in the performance of a Party's obligation(s) under this Agreement, the due date for the performance of the original obligation(s) shall be extended by a term equal to the time lost by reason of the delay. In the event of such delay, the delaying Party shall perform its obligations at a performance level no less than that which it uses for its own operations. In the event of a labor dispute or strike, the Parties agree to provide service to each other at a level equivalent to the level they provide themselves. In the event of a labor dispute or strike or work stoppage that continues for a period in excess of forty-eight (48) hours, AT&T may obtain replacement services for those services affected by such labor dispute or strike or work stoppage, in which event any liability of AT&T for the affected services shall be suspended for the period of the work stoppage or labor dispute or strike. In the event of such performance delay or failure by USWEST, USWEST agrees to resume performance in a nondiscriminatory manner and not favor its own provision of Telecommunications Services above that of AT&T.

#### 26. Escalation Procedures

26.1 AT&T and U S WEST agree to exchange escalation lists which reflect contact personnel including vice president-level officers. These lists shall include name, department, title, phone number, and fax number for each person. AT&T and U S WEST agree to exchange up-to-date lists as reasonably necessary.

# 27. Dispute Resolution

- 27.1<sup>13</sup> If any claim, controversy or dispute between the Parties, their agents, employees, officers, directors or affiliated agents ("Dispute") cannot be settled through negotiation, it may be resolved by arbitration conducted by a single arbitrator engaged in the practice of law, under the then current rules of the American Arbitration Association ("AAA"). The Federal Arbitration Act, 9 U.S.C. Secs. 1-16, not state law, shall govern the arbitrability of all Disputes. The arbitrator shall not have authority to award punitive damages. All expedited procedures prescribed by the AAA rules shall apply. The arbitrator's award shall be final and binding and may be entered in any court having jurisdiction thereof and shall be noticed to the Commission. The arbitrator shall determine which Party or Parties will bear the costs of arbitration, including apportionment, if appropriate. The arbitration shall occur in Denver, Colorado, and the governing law shall be in accordance with Section 21.1 above.
- 27.2<sup>14</sup> In the event AT&T and U S WEST are unable to agree on certain issues during the term of this Agreement, the Parties may identify such issues for arbitration before the Commission. Only those points identified by the Parties for arbitration will be submitted.

<sup>13</sup> AT&T Order, p. 33 at Issue 76.

<sup>14</sup> AT&T Order, p. 33 at Issue 76.

If a Dispute is submitted to arbitration pursuant to Section 27.1 above, the procedures described in this Section 27.3 shall apply, notwithstanding the then current rules of the AAA. Discovery shall be controlled by the arbitrator and shall be permitted to the extent set forth below. Each party may submit in writing to a Party, and that Party shall so respond, to an agreed amount of the following: interrogatories, demands to produce documents, and requests for admission. Not less than ten (10) days prior to the arbitration hearing, the Parties shall exchange witness and exhibit lists. Deposition discovery shall be controlled by the arbitrator. Additional discovery may be permitted upon mutual agreement of the Parties or the determination of the arbitrator. The arbitration hearing shall be commenced within thirty (30) days after a demand for arbitration by either Party and shall be held in Phoenix. The arbitrator shall control the scheduling so as to process the matter expeditiously. The Parties may submit written briefs. The arbitrator shall rule on the dispute by issuing a written opinion within seven (7) days after the close of the hearings. The times specified in this section may be extended upon mutual agreement of the Parties or by the arbitrator upon a showing of good cause. The decision of the arbitrator shall be final and binding upon the Parties and judgment upon the award rendered by the arbitrator may be entered in a court having jurisdiction. The decision shall also be submitted to the Commission.

## 28. Nondisclosure

- All information, including, but not limited to, specifications, microfilm, photocopies, magnetic disks, magnetic tapes, drawings, sketches, models, samples, tools, technical information, data, employee records, maps, financial reports, and market data (a) furnished by one Party to the other Party dealing with Customer specific, facility specific, or usage specific information, other than Customer information communicated for the purpose of publication of directory database inclusion, or (b) in written, graphic, electromagnetic, or other tangible form and marked at the time of delivery as "Confidential" or "Proprietary", or (c) declared orally or in writing to the Recipient at the time of delivery, or by written notice given to the Recipient within ten (10) days after delivery, to be "Confidential" or "Proprietary" (collectively referred to as "Proprietary Information"), shall remain the property of the Discloser. A Party who receives Proprietary Information via an oral communication may request written confirmation that the material is Proprietary Information. A Party who delivers Proprietary Information via an oral communication that the Party receiving the information understands that the material is Proprietary Information.
- Upon request by the Discloser, the Recipient shall return all tangible copies of Proprietary Information, whether written, graphic or otherwise, except that the Recipient's legal counsel may retain one (1) copy for archival purposes.
- 28.3 Each Party shall keep all of the other Party's Proprietary Information confidential and shall use the other Party's Proprietary Information only in connection with this Agreement. Neither Party shall use the other Party's Proprietary Information for any other purpose except upon such terms and conditions as may be agreed upon between the Parties in writing.
- 28.4 Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this Agreement do not apply to such Proprietary Information that:

- 28.4.1 was, at the time of receipt, already known to the Recipient free of any obligation to keep it confidential evidenced by written records prepared prior to delivery by the Discloser; or
- 28.4.2 is or becomes publicly known through no wrongful act of the Recipient; or
- 28.4.3 is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the Discloser with respect to such information; or
- 28.4.4 is independently developed by an employee, agent, or contractor of the Recipient which individual is not involved in any manner with the provision of services pursuant to this Agreement and does not have any direct or indirect access to the Proprietary Information; or
- 28.4.5 is approved for release by written authorization of the Discloser; or
- 28.4.6 is required by law, a court, or governmental agency, provided that the Discloser has been notified of the requirement promptly after the Recipient becomes aware of the requirement, subject to the right of the Discloser to seek a protective order as provided in Section 28.5 below.
- 28.5 For a period of ten (10) years from receipt of Proprietary Information, the Recipient shall (a) use it only for the purpose of performing under this Agreement, (b) hold it in confidence and disclose it only to employees, authorized contractors and authorized agents who have a need to know it in order to perform under this Agreement, and (c) safeguard it from unauthorized use or disclosure using no less than the degree of care with which the Recipient safeguards its own Proprietary Information. Any authorized contractor or agent to whom Proprietary Information is provided must have executed a written agreement comparable in scope to the terms of this Section. Not withstanding the foregoing, each Party shall provide advance notice of three (3) Business Days to the other of the intent to provide Proprietary information to a governmental authority and the Parties shall cooperate with each other in attempting to obtain a suitable protective order. The Recipient agrees to comply with any protective order that covers the Proprietary Information to be disclosed.
- 28.6 Each Party agrees that the Discloser would be irreparably injured by a breach of this Section 28 by the Recipient or its representatives and that the Discloser shall be entitled to seek equitable relief, including injunctive relief and specific performance, in the event of any breach of this Section 28. Such remedies shall not be exclusive but shall be in addition to all other remedies available at law or in equity.
- 28.7 CPNI related to either Party's subscribers obtained by virtue of Local Interconnection or any other service provided under this Agreement shall be the Discloser's Proprietary Information and may not be used by the Recipient for any purpose except performance of its obligations under this Agreement, and in connection with such performance, shall be disclosed only to employees, authorized contractors and authorized agents with a need to know, unless the subscriber expressly directs the Discloser to disclose such information to the Recipient pursuant to the requirements of Section 222(c)(2) of the Act. If the Recipient seeks and obtains written approval to use or disclose such CPNI from the Discloser, such approval shall be obtained only in compliance with Section 222(c)(2) and, in the event such authorization is obtained, the Recipient may use or disclose only such information as the Discloser provides pursuant to such authorization and may not use information that the

- Recipient has otherwise obtained, directly or indirectly, in connection with its performance under this Agreement.
- 28.8 Except as otherwise expressly provided in this Section 28, nothing herein shall be construed as limiting the rights of either Party with respect to its subscriber information under any applicable law, including, without limitation, Section 222 of the Act.
- 28.9 Effective Date Of This Section. Notwithstanding any other provision of this Agreement, the Proprietary Information provisions of this Agreement shall apply to all Proprietary Information furnished by either Party with a claim of confidentiality or proprietary nature at any time.

## 29. Notices

29.1 Except as otherwise provided herein, all notices or other communication hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, certified mail, postage prepaid, return receipt requested, or delivered by prepaid overnight express mail, and addressed as follows:

To AT&T:

AT&T

Vice President, Local Services 1875 Lawrence Street Denver, Colorado 80202

Copy to:

AT&T

Vice President, Law 1875 Lawrence Street Denver, Colorado 80202

To U S WEST:

U.S.WEST

**Executive Director Interconnect Services** 

1801 California, 23rd Floor Denver, Colorado 80202

Copy to:

U S WEST, Inc.

Senior Counsel, Law Dept.

7800 East Orchard Road, Suite 480 Englewood, Colorado 80111

29.2 If personal delivery is selected to give notice, a receipt of such delivery shall be obtained. The address to which notices or communications may be given to either Party may be changed by written notice given by such Party to the other pursuant to this Section 29.

#### 30. Assignment

30.1 Neither Party may assign, transfer (whether by operation of law or otherwise) or delegate this Agreement (or any rights or obligations hereunder) to a third party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, provided that each Party may assign this Agreement to an Affiliate or an entity under its common control or an entity acquiring all or substantially all of its assets or equity by providing prior written notice to the other Party of such assignment or transfer. Any attempted assignment or transfer that is not permitted under the provisions of this Section

30 is void <u>ab initio</u>. Without limiting the generality of the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the Parties' respective successors and assigns. No assignment or delegation hereof shall relieve the assignor of its obligations under this Agreement.

- 30.2 If any obligation of USWEST under this Agreement is performed by a subcontractor or Affiliate, USWEST shall remain fully responsible for the performance of this Agreement in accordance with its terms, and USWEST shall be solely responsible for payments due to its subcontractors.
- 30.3 If any obligation of AT&T under this Agreement is performed by a subcontractor or Affiliate, AT&T shall remain fully responsible for the performance of this Agreement in accordance with its terms, and AT&T shall be solely responsible for payments due to its subcontractors.

#### 31. Warranties

- 31.1 U S WEST shall conduct all activities and interfaces which are provided for under this Agreement with AT&T Customers in a carrier-neutral, nondiscriminatory manner.
- 31.2 US WEST warrants that it has provided, and during the term of this Agreement it will continue to provide, to AT&T true and complete copies of all material agreements in effect between US WEST and any third party (including Affiliates) providing any services to AT&T on behalf of or under contract to US WEST in connection with US WEST's performance of this Agreement, or from whom US WEST has obtained licenses or other rights used by US WEST to perform its obligations under this Agreement, provided, however, that US WEST may provide such agreements under appropriate protective order.

#### 32. Default

- 32.1 In the event of a breach of any material provision of this Agreement by either Party, the non-breaching Party shall give the breaching Party and the Commission written notice thereof, and:
  - 32.1.1 if such material breach is for non-payment of amounts due hereunder pursuant to this Agreement, the breaching Party shall cure such breach within thirty (30) calendar days of receiving such notice. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach. Amounts disputed in good faith and withheld or set off shall not be deemed "amounts due hereunder" for the purpose of this provision.
  - 32.1.2 if such material breach is for any failure to perform in accordance with this Agreement, which, in the sole judgment of the non-breaching Party, adversely affects the non-breaching Party's subscribers, the non-breaching Party shall give notice of the breach and the breaching Party shall cure such breach to the non-breaching Party's reasonable satisfaction within ten (10) calendar days or within a period of time equivalent to the applicable interval required by this Agreement, whichever is shorter. If the breaching Party does not cure such breach within the applicable time period, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach. Notice under this

Subsection 32.1.2 may be given electronically or by facsimile, provided that a hard copy or original of such notice is sent by overnight delivery service.

- 32.1.3 if such material breach is for any other failure to perform in accordance with this Agreement, the breaching Party shall cure such breach to the non-breaching Party's reasonable satisfaction within forty-five (45) calendar days, and, if it does not, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach.
- 32.2 AT&T may terminate this Agreement in whole at any time only for cause upon sixty (60) calendar days' prior written notice. AT&T's sole liability shall be payment of amounts due for services provided or obligations assumed up to the date of termination.
- 32.3 In the event of any termination under this Section 32, USWEST and AT&T agree to cooperate to provide for an uninterrupted transition of services to AT&T or another vendor designated by AT&T to the extent that USWEST has the ability to provide such cooperation.
- 32.4 Notwithstanding any termination hereof, the Parties shall continue to comply with their obligations under the Act.

#### 33. Remedies

- 33.1 In the event U S WEST fails to switch a subscriber to AT&T service as provided in this Agreement, U S WEST shall reimburse AT&T in an amount equal to all fees paid by such subscriber to U S WEST for such failed-to-be-transferred services from the time of such failure to switch to the time at which the subscriber switch is accomplished. This remedy shall be in addition to all other remedies available to AT&T under this Agreement or otherwise available.
- 33.2 All rights of termination, cancellation or other remedies prescribed in this Agreement, or otherwise available, are cumulative and are not intended to be exclusive of other remedies to which the injured Party may be entitled at law or equity in case of any breach or threatened breach by the other Party of any provision of this Agreement. Use of one or more remedies shall not bar use of any other remedy for the purpose of enforcing the provisions of this Agreement.

# 34. Waivers

- 34.1 No waiver of any provisions of this Agreement and no consent to any default under this Agreement shall be effective unless the same shall be in writing and properly executed by or on behalf of the Party against whom such waiver or consent is claimed.
- 34.2 No course of dealing or failure of either Party to strictly enforce any term, right, or condition of this Agreement in any instance shall be construed as a general waiver or relinquishment of such term, right or condition.
- 34.3 Waiver by either Party of any default or breach by the other Party shall not be deemed a waiver of any other default or breach.

34.4 By entering into this Agreement, neither Party waives any right granted to it pursuant to the Act.

## 35. No Third Party Beneficiaries

35.1 The provisions of this Agreement are for the benefit of the Parties hereto and not for any other person; provided, however, that this shall not be construed to prevent AT&T from providing its Telecommunications Services to other carriers. This Agreement shall not provide any person not a party hereto with any remedy, claim, liability, reimbursement, claim of action, or other right in excess of those existing without reference hereto.

# 36. Physical Security

- 36.1 US WEST shall exercise the same degree of care to prevent harm or damage to AT&T or its employees, agents or subscribers, or its property as US WEST provides itself. AT&T shall exercise the same degree of care to ensure the security of its equipment physically collocated within US WEST's space as AT&T provides such security to itself.
  - 36.1.1 U S WEST will restrict access to approved personnel to U S WEST's buildings. AT&T is responsible for the action of its employees and other authorized non-AT&T personnel; U S WEST is responsible for the action of its employees and other authorized non-U S WEST personnel.
  - 36.1.2 U S WEST will furnish to AT&T the current name(s) and telephone number(s) of those central office supervisor(s) where a physical collocation arrangement exists. The central office supervisor(s) will be the only U S WEST employee(s) with access to AT&T collocation space.
  - 36.1.3 U S WEST will comply at all times with U S WEST security and safety procedures at the individual central office locations where AT&T has physical collocation arrangements. The Parties will cooperate to analyze security procedures of each company to evaluate ways in which security procedures of US WEST may be enhanced.
  - 36.1.4 U S WEST will allow AT&T to inspect or observe its physical spaces which house or contain AT&T equipment or equipment enclosures at any time upon completion of the physical collocation quotation. Upon completion of the build out of the physical space, U S WEST will furnish AT&T with all keys, entry codes, lock combinations, or other materials or information which may be needed to gain entry via direct access to AT&T's physical space.
  - 36.1.5 U S WEST agrees to logically partition any U S WEST owned access device systems, whether biometric or card reader, or types which are encoded identically or mechanical coded locks on external and or internal doors to spaces which house AT&T equipment.
  - 36.1.6 US WEST agrees to limit the keys used in its keying systems for spaces which contain AT&T equipment to the US WEST supervisor for the specific facility to emergency access only. AT&T shall further have the right to change locks where deemed necessary for the protection and security of its physical spaces and will provide the US WEST supervisor with the current key.

- 36.1.8 U S WEST shall control unauthorized access from passenger and freight elevators, elevator lobbies and spaces which contain or house AT&T equipment or equipment space in the same manner as U S WEST provides such control for itself.
- 36.1.9 U S WEST will provide notification to designated AT&T personnel to indicate an actual or attempted security breach of AT&T physical space in the same time frame as U S WEST provides such notification to itself.

# 37. Network Security

- 37.1 U S WEST shall provide an appropriate and sufficient back-up and recovery plan to be used in the event of a system failure or emergency.
- 37.2 U S WEST shall install controls to (a) disconnect a user for a pre-determined period of inactivity on authorized ports; (b) protect subscriber proprietary information; and (c) ensure both ongoing operational and update integrity.
- 37.3 Each Party shall be responsible for the security arrangements on its side of the network to the Point of Interconnection. The Parties shall jointly cooperate to analyze network security procedures and cooperate to ensure the systems, access and devices are appropriately secured and compatible.

#### 38. Revenue Protection

- 38.1 U S WEST shall make available to AT&T all present and future fraud prevention or revenue protection features that U S WEST provides to itself or others. These features include, but are not limited to, operator screening codes, information digits assigned such as information digits '29' and '70' which indicate prison and COCOT pay phone originating line types respectively, in accordance with the requirements established by the FCC, call blocking of domestic, international blocking for business and residence, 900, NPA-976, and specific line numbers. U S WEST shall additionally provide partitioned access to fraud prevention, detection and control functionality within pertinent Operations Support Systems ("OSS") which include, but are not limited to, Line Information Data Base Fraud monitoring systems.
- 38.2 Uncollectible or unbillable revenues resulting from, but not confined to, provisioning, maintenance, or signal network routing errors shall be the responsibility of the Party causing such error.
- 38.3 Uncollectible or unbillable revenues resulting from the accidental or malicious alteration of software underlying Network Elements or their subtending operational support systems by unauthorized third parties shall be the responsibility of the Party having administrative control of access to said Network Element or operational support system software.
- 38.4 Each Party shall be responsible for any uncollectible or unbillable revenues resulting from the unauthorized use of facilities under its control or services it provides, including clip-on fraud.
- 38.5 The Parties shall work cooperatively to minimize fraud associated with third-number billed calls, calling card calls, and any other services related to this Agreement.

#### 39. Law Enforcement Interface

39.1 U S WEST shall provide all necessary assistance to facilitate the execution of wiretap or dialed number recorder orders from law enforcement authorities.

#### 40. Collocation

#### 40.1 General Description

- 40.1.1 Collocation is the right of AT&T to obtain dedicated space in U S WEST Local Serving Office (LSO) or other U S WEST locations, including, but not limited to, U S WEST serving wire center and tandem offices, as well as all buildings or similar structures owned or leased by U S WEST, whether or not on public rights-of way, that house U S WEST network facilities, including, but not limited to, vaults containing loop concentrators or similar structures, and the right to place equipment in such spaces for the purposes of interconnection with U S WEST's network or access to U S WEST's unbundled Network Elements. Collocation also includes U S WEST providing resources necessary for the operation and economical use of collocated equipment. 15
- 40.1.2 Collocation is offered for network interconnection between the Parties. AT&T may cross connect to other collocated parties via facilities provided by USWEST, provided that AT&T's collocated equipment is also used for interconnection with USWEST or access to USWEST's unbundled Network Elements.
- 40.1.3 AT&T is responsible for bringing its own or leased facilities to the USWEST-designated Point of Interface ("POI"). USWEST will extend AT&T's facilities from the POI to the cable vault within the wire center. If necessary, USWEST may bring the facilities into compliance with USWEST internal fire code standards and extend the facilities to the collocated space.
- 40.1.4 AT&T will be provided two (2) points of entry into the U S WEST wire center only when there are at least two (2) existing entry points for U S WEST cable and when there are vacant entrance ducts in both.
- 40.1.5 AT&T may collocate transmission equipment (including Digital Cross Connect Systems and Remote Switching Units (RSU)) to terminate basic transmission facilities. AT&T may not collocate equipment used to provide enhanced services. AT&T must identify what equipment will be installed, to allow for U S WEST to use this information in engineering the power, floor loading, heat release, environmental participant level, and HVAC. AT&T shall not use RSUs to enable the bypassing of switched access charges. U S WEST will be permitted to audit AT&T's reporting of local and toll calls. At AT&T's expense, AT&T will be required to block the ability of RSUs to bypass switched access charges, if it becomes feasible to do so.<sup>16</sup>

MCIm Order, p. 19 at Issue 31 and AT&T Order Issue 10.

MCIm Order, p. 20 at Issue 32 and AT&T Order Issue 9.

- 40.1.6 AT&T may collocate the amount and type of equipment it deems necessary in its collocated space in accordance with FCC rules and regulations.<sup>17</sup>
- 40.1.7 Expanded Interconnection Channel Termination (EICT). Telecommunications interconnection between AT&T's collocated equipment and U S WEST's network may be accomplished via an Expanded Interconnection Channel Termination (EICT). This element can be at the DS-3, DS-1, DS-0, or any other technically feasible level, subject to network disclosure requirements of the FCC, depending on the U S WEST service to which it is connected. The terms and conditions of the tariff for EICT are incorporated only to the extent that they are agreed to by the Parties. Within ninety (90) days (or other acceptable time agreed to by the Parties) of the Effective Date of this Agreement, the Parties will meet to review the tariff and seek resolution on disagreed items.
- 40.1.8 Consistent with USWEST's internal practice, within ten (10) Business Days of AT&T's request for any space, USWEST shall provide information available to it regarding the environmental conditions of the space provided for placement of equipment and interconnection, including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in USWEST's possession or files, or the possession of an agent, contractor, employee, lessor, or tenant of USWEST's that holds such information on USWEST's behalf.
- 40.1.9 US WEST shall allow AT&T to perform any environmental site investigations, including, but not limited to, asbestos surveys, which AT&T deems to be necessary in support of its collocation needs. AT&T shall advise US WEST in writing of its intent to conduct such investigation, and shall receive written approval from US WEST to proceed. AT&T shall indemnify US WEST according to Section 18 of Part A of this Agreement for any loss or claim for damage suffered by US WEST as a result of AT&T's actions during any site inspection.
- 40.1.10 If the space provided for the placement of equipment, Interconnection, or provision of service contains environmental contamination or hazardous material, particularly, but not limited to, asbestos, lead paint or radon, which makes the placement of such equipment or interconnection hazardous, U S WEST shall offer an alternative space, if available, for AT&T's consideration.

#### 40.2 Virtual Collocation

- 40.2.1 US WEST shall provide virtual collocation for the purpose of Interconnection or access to unbundled Network Elements subject to the rates, terms and conditions of this Agreement.
- 40.2.2 Upon mutual agreement, AT&T will have physical access to the USWEST wire center building pursuant to a virtual collocation arrangement.

MCIm Order, p. 20 at Issue 32 and AT&T Order Issue 9.

- 40.2.3 AT&T will be responsible for obtaining and providing to U S WEST administrative codes, e.g., common language codes, for all equipment specified by AT&T and installed in wire center buildings.
- 40.2.4 AT&T will be responsible for payment of training of U S WEST employees for the maintenance, operation and installation of AT&T's virtually collocated equipment when that equipment is different than the equipment used by U S WEST. Training conditions are further described in the Virtual Collocation Rate Element section following.
- 40.2.5 AT&T will be responsible for payment of reasonable charges incurred as a result of agreed upon maintenance and/or repair of AT&T's virtually collocated equipment.
- 40.2.6 US WEST does not guarantee the reliability of AT&T's virtually collocated equipment, but US WEST is responsible for proper installation, maintenance and repair of such equipment, including the change out of electronic cards provided by AT&T.
- 40.2.7 AT&T is responsible for ensuring the functionality and interoperability of virtually collocated SONET equipment provided by different manufacturers.
- 40.2.8 AT&T, as bailor, will transfer possession of AT&T's virtually collocated equipment to U S WEST, as bailee, for the sole purpose of providing U S WEST with the ability to install, maintain and repair AT&T's virtually collocated equipment. Title to the AT&T virtually collocated equipment shall not pass to U S WEST.
- 40.2.9 AT&T shall ensure that upon receipt by U S WEST of AT&T's virtually collocated equipment, AT&T will make available all access to ongoing technical support to U S WEST, as available under the equipment warranty or other terms and conditions, all at AT&T's expense. AT&T shall advise the manufacturer and seller of the virtually collocated equipment that it will be installed, maintained and repaired by U S WEST.
- 40.2.10 AT&T's virtually collocated equipment must comply with the Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements TR-NWT-000063, electromagnetic compatibility (EMC) per GR-1089-CORE, Company wire center environmental and transmission standards and any statutory (local, state or federal) and/or regulatory requirements, all of the foregoing which may be in effect at the time of equipment installation or which may subsequently become effective. AT&T shall provide U S WEST interface specifications (e.g., electrical, functional, physical and software) of AT&T's virtually collocated equipment.
- 40.2.11 AT&T must specify all software options and associated plug-ins for its virtually collocated equipment.
- 40.2.12 AT&T is responsible for purchasing and maintaining a supply of spares. Upon failure of the AT&T virtually collocated equipment, AT&T is responsible for transportation and delivery of maintenance spares to U S WEST at the wire center housing the failed equipment.

40.2.13 Where AT&T is virtually collocated in a premises which was initially prepared for virtual collocation, AT&T may elect to retain its virtual collocation in that premises and expand that virtual collocation according to the rates, terms and conditions of this Agreement.

# 40.3 Physical Collocation

- 40.3.1 U S WEST shall provide to AT&T physical collocation of equipment necessary for Interconnection or for access to unbundled Network Elements, except that U S WEST shall provide for virtual collocation where space is available or expansion or rearrangement is possible if U S WEST demonstrates to the Commission that physical collocation is not practical for technical reasons or because of space limitations, as provided in Section 251(c)(6) of the Act. AT&T shall pay a prorated amount for expansion of said space. U S WEST shall provide such collocation for the purpose of Interconnection or access to unbundled Network Elements, except as otherwise mutually agreed to in writing by the Parties or as required by the FCC or the Commission, subject to the rates, terms and conditions of this Agreement.
- 40.3.1.1 US WEST shall permit AT&T to use vendors for all required engineering and installation services associated with its collocated equipment which are being collocated by AT&T pursuant to this Agreement. Within one hundred and twenty (120) days after the Effective Date of this Agreement, US WEST and AT&T shall compose and agree on a list of approved vendors and/or agree on minimum qualifications for such contractors consistent with industry standards, such agreement not to be unreasonably withheld. In the event such agreement cannot be reached and the dispute resolution process outlined in Section 27 above has not concluded on the issue of approved vendors, the list of approved vendors maintained by US WEST as of the Effective Date of this Agreement shall be the default list until the conclusion of the dispute resolution process. 18
- 40.3.2 Where AT&T is virtually collocated in a premises which was initially prepared for virtual collocation, AT&T may elect, unless it is not practical for technical reasons or because of space limitations, to convert its virtual collocation to physical collocation at such premises in which case AT&T shall coordinate the construction and rearrangement with USWEST of its equipment (IDLC and transmission) and circuits for which AT&T shall pay USWEST at applicable rates, and pursuant to the other terms and conditions in this Agreement. In addition, all applicable physical collocation recurring charges shall apply.
- 40.3,3 AT&T will be allowed access to the POI on non-discriminatory terms. AT&T owns and is responsible for the installation, maintenance and repair of its equipment located within the space rented from U S WEST.
- 40.3.4 AT&T must use leased space as soon as reasonably possible and may not warehouse space for later use or sublease to another provider. Physical collocation is offered on a space-available, first-come, first-served basis.

AT&T Order, p. 8 at Issue 9c.

- 40.3.5 The minimum standard leasable amount of floor space is one hundred (100) square feet. AT&T must efficiently use the leased space and no more than fifty percent (50%) of the floor space may be used for storage cabinets and work surfaces. AT&T and U S WEST may negotiate other storage arrangements on a case-by-case basis. AT&T may store spares within its collocated space.
- 40.3.6 AT&T's leased floor space will be separated from other competitive providers and USWEST space through cages or hard walls. AT&T may elect to have USWEST construct the cage, or choose from USWEST approved contractors to construct the cage, meeting USWEST's installation Technical Publication 77350. Any deviation to AT&T's request must be approved.
- 40.3.7 The following standard features will be provided by U S WEST:
  - (a) Heating, ventilation and air conditioning.
  - (b) Smoke/fire detection and any other building code requirement.

### 40.3.8 U S WEST Responsibilities

- (a) Design the floor space within each location which will constitute AT&T's leased space.
- (b) Ensure that the necessary construction work is performed on a timely basis to build AT&T's leased physical space and the riser from the vault to the leased physical space.
- (c) Develop a quotation specific to AT&T's request.
- (d) Extend U S WEST-provided and owned fiber optic, copper or coaxial<sup>20</sup> cable, whichever is more efficient, from the POI through the cable vault and extend the cable to AT&T's leased physical space or place the cable in fire retardant tubing prior to extension to AT&T's leased physical space.
- (e) Installation and maintenance and all related activity necessary to provide Channel Termination between U S WEST's and AT&T's equipment.
- (f) Work cooperatively with AT&T in matters of joint testing and maintenance.

#### 40.3.9 AT&T Responsibilities

(a) Determine the type of enclosure for the physical space.

AT&T Order, p. 10 at Issue 10(a).

AT&T Order, p. 10, Issue 10(a).

- (b) Procure, install and maintain fiber optic, copper or coaxial<sup>21</sup> facilities up to the U S WEST designated POI.
- (c) Provide for installation, maintenance, repair and service of all AT&T's equipment located in the leased physical space.
- (d) Ensure that all equipment installed by AT&T complies with Bellcore Network Equipment Building System Generic Equipment requirements, U S WEST environmental and transmission standards, and any statutory (local, federal, or state) or regulatory requirements in effect at the time of equipment installation or that subsequently become effective.
- 40.3.10 The installation of any Interconnection service will be coordinated between the Parties so that AT&T may utilize those services once AT&T has accepted its leased physical space.
- 40.3.11 If, at any time, USWEST reasonably determines that the equipment or the installation does not meet standard industry requirements, such failure being due to actions of AT&T or its agents, AT&T will be responsible for the costs associated with the removal, modification to, or installation of the equipment to bring it into compliance. If AT&T fails to correct any non-compliance within thirty (30) calendar days or as soon as reasonably practical after the receipt of written notice of non-compliance, USWEST may have the equipment removed or the condition corrected at AT&T's expense.
- 40.3.12 If, during installation, USWEST reasonably determines that AT&T activities or equipment are unsafe, non-industry standard or in violation of any applicable laws or regulations, USWEST has the right to stop work until the situation is remedied. If such conditions pose an immediate threat to the safety of personnel, interfere with the performance of USWEST's service obligations, or pose an immediate threat to the physical integrity of the conduit system or the cable facilities, USWEST may perform such work and/or take action as is necessary to correct the condition at AT&T's expense.
- 40.3.13 US WEST shall provide basic telephone service with a connection jack as requested by AT&T from US WEST for the collocated space. Upon AT&T's request and following the normal provisioning process, this service shall be available at the AT&T collocated space on the day the space is turned over to AT&T by US WEST.
- 40.3.14 Where available, USWEST shall provide access to eyewash stations, bathrooms, and drinking water within the collocated facility on a twenty-four (24) hour per day, seven (7) day per week basis for AT&T personnel and its designated agents.
- 40.3.15 U S WEST shall provide AT&T with written notice five (5) Business Days prior to those instances where U S WEST or its subcontractors may be performing work that could reasonably potentially affect AT&T's service. U S WEST will make

AT&T Order, p. 10, Issue 10(a).

reasonable efforts to inform AT&T by telephone of any emergency related activity prior to the start of the activity that USWEST or its subcontractors may be performing that could reasonably potentially affect AT&T's service, so that AT&T can take any action required to monitor or protect its service.

- 40.3.16 USWEST shall provide information regarding the location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for USWEST point of termination to AT&T within five (5) Business Days of AT&T's acceptance of USWEST's quote for collocated space.
- 40.3.17 U S WEST shall provide the dimensions for AT&T outside plant fiber ingress and egress into AT&T collocated space within five (5) Business Days of AT&T's acceptance of U S WEST's quote for collocated space.
- 40.3.18 US WEST shall provide the sizes and number of power feeders for the collocated space to AT&T within ten (10) Business Days of AT&T's acceptance of US WEST's quote for collocated space.
- 40.3.19 U S WEST shall provide positive confirmation to AT&T when construction of AT&T collocated space is fifty percent (50%) completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.
- 40.3.20 [Intentionally left blank for numbering consistency]
- 40.3.21 With the exception of Subparagraph (b) below, USWEST shall provide the following information to AT&T within five (5) Business Days or as reasonably necessary upon receipt of a written request from AT&T:
  - (a) additional work restriction guidelines.
  - (b) USWEST or industry technical publication guidelines that impact the design of USWEST collocated equipment, unless such documents are already in the possession of AT&T. The following USWEST Technical Publications provide information regarding central office equipment and collocation guidelines:
    - 77350 Central Office Telecommunications Equipment Installation and Removal Guidelines
    - 77351 Central Office Telecommunications Equipment Engineering Standards
    - 77355 Grounding Central Office and Remote Equipment Environment
    - 77386 Expanded Interconnection and Collocation for Private Line Transport and Switched Access Services

AT&T may obtain the above documents from:

Faison Office Products Company 3251 Revere St., Suite 200 Aurora, Colorado 80011 (303) 340-3672 (c) appropriate USWEST contacts (names and telephone numbers) for the following areas:

Engineering
Physical & Logical Security
Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety

- (d) escalation process for the USWEST employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to AT&T's collocation.
- 40.3.22 Power as referenced in this Agreement refers to any electrical power source supplied by US WEST for AT&T equipment. US WEST will supply power to support AT&T equipment at equipment specific DC and AC voltages. At a minimum, US WEST shall supply power to AT&T at parity with that provided by US WEST to itself. If US WEST performance, availability or restoration falls below industry standards, US WEST shall bring itself into compliance with such industry standards as soon as technologically feasible.
  - (a) Central office power supplied by U S WEST into the AT&T equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated AT&T equipment area. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of AT&T equipment. The termination location shall be mutually agreed upon by the Parties.
  - (b) USWEST power equipment supporting AT&T's equipment shall:
    - comply with applicable industry standards (e.g., Bellcore, NEBS, IEEE, UL, and NEC) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
    - ii. have redundant power feeds with physical diversity and battery back-up as required by the equipment manufacturer's specifications for AT&T equipment, or, at minimum, at parity with that provided for similar U S WEST equipment at that location;
    - iii. provide central office ground, connected to a ground electrode located within the AT&T collocated space, at a level above the top of AT&T equipment plus or minus two (2) feet to the left or right of AT&T's final request;
    - iv. provide an installation sequence and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing services of either Party;

- provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
- vi. provide Lock Out-Tag Out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines; and
- vii. ensure that installed equipment meets Bellcore specifications.

#### 40.4 Collocation Rate Elements

#### 40.4.1 Common Rate Elements

The following rate elements are common to both virtual and physical collocation:

- (a) Quote Preparation Fee. This covers the work involved in developing a quotation for AT&T for the total costs involved in its collocation request.
- (b) Entrance Facility. Provides for fiber optic cable on a per two (2) fiber increment basis from the point of interconnection utilizing USWEST owned, conventional single mode type of fiber optic cable to the collocated equipment (for virtual collocation) or to the leased space (for physical collocation). Entrance facility includes riser, fiber placement, entrance closure, conduit/innerduct, and core drilling.
- (c) Cable Splicing. Represents the labor and equipment to perform a subsequent splice to the AT&T provided fiber optic cable after the initial installation splice. Includes a per-setup and a per-fiber-spliced rate elements.
- (d) 48 Volt Power. Provides 48 volt power to the AT&T collocated equipment. Charged on a per ampere basis.
- (e) 48 Volt Power Cable. Provides for the transmission of -48 Volt DC power to the collocated equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack and local power bay to the closest power distribution bay. It also includes the power cable (feeders) A and B from the local power distribution bay to the leased physical space (for physical collocation) or to the collocated equipment (for virtual collocation).
- (f) Inspector Labor. Provides for the USWEST qualified personnel necessary when AT&T requires access to the POI after the initial installation or access to its physical collocation floor space, where an escort is required. A call-out of an inspector after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours

- are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (g) Expanded Interconnection Channel Regeneration. Required when the distance from the leased physical space (for physical collocation) or from the collocated equipment (for virtual collocation) to the U S WEST network is of sufficient length to require regeneration.
- (h) US WEST will provide external synchronization when available.
- (i) U S WEST will provide 20 hertz ringing supply when available.

## 40.4.2 Physical Collocation Rate Elements

The following rate elements apply only to physical collocation arrangements:

- (a) Enclosure Buildout. The Enclosure Buildout element, either Cage or Hardwall, includes the material and labor to construct the enclosure specified by AT&T or AT&T may choose from USWEST approved contractors to construct the cage, meeting USWEST's installation Technical Publication 77350. It includes the enclosure (cage or hardwall), air conditioning (to support AT&T loads specified), lighting (not to exceed 2 watts per square foot), and convenience outlets (3 per cage or the number required by building code for the hardwall enclosure). Also provides for humidification, if required. Pricing for Enclosure Buildout will be provided on an individual basis due to the uniqueness of AT&T's requirements, central office structure and arrangements.
- (b) Floor Space Rental. This element provides for the rental of the floor space provided to AT&T pursuant to a physical collocation arrangement.

# 40.4.3 Virtual Collocation Rate Elements

The following rate elements apply only to virtual collocation arrangements:

- (a) Maintenance Labor. Provides for the labor necessary for repair of out of service and/or service-affecting conditions and preventative maintenance of the AT&T virtually collocated equipment. AT&T is responsible for ordering maintenance spares. U S WEST will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment for AT&T. A call-out of a maintenance technician after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (b) Training Labor. Provides for the billing of vendor-provided training for US WEST personnel on a metropolitan service area basis, necessary for AT&T virtually collocated equipment which is different from equipment used by US WEST. US WEST will require three (3) US WEST employees to

be trained per metropolitan service area in which the AT&T virtually collocated equipment is located. If, by an act of USWEST, trained employees are relocated, retired, or are no longer available, USWEST will not require AT&T to provide training for additional USWEST employees for the same virtually collocated equipment in the same metropolitan area. Fifty percent (50%) of the amount of training billed to AT&T will be refunded to AT&T, should a second collocator or USWEST in the same metropolitan area select the same virtually collocated equipment as AT&T. The second collocator or USWEST will be charged one half of the original amount paid by AT&T for the same metropolitan area.

- (c) Equipment Bay. Provides mounting space for the AT&T virtually collocated equipment. Each bay includes the seven (7) foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation is limited to 78 inches. The monthly rate is applied per shelf.
- (d) Engineering Labor. Provides the planning and engineering of the AT&T virtually collocated equipment at the time of installation, change or removal.
- (e) Installation Labor. Provides for the installation, change or removal of the AT&T virtually collocated equipment.

#### 40.5. Collocation Installation Intervals

40.5.1 US WEST shall have a period of thirty (30) calendar days after receipt by AT&T of a Request for Collocation to provide AT&T with a written quotation containing all nonrecurring charges and fees for the requested collocation (the "Quotation Preparation Period"). AT&T shall make payment of fifty percent (50%) of the nonrecurring charges and fees upon acceptance of the quotation ("Initial Payment") with the remainder due upon completion of the construction. In the event AT&T disputes the amount of USWEST's proposed nonrecurring charges and fees, AT&T shall deposit fifty percent (50%) of the nonrecurring charges and fees into an interest bearing escrow account prior to the commencement of construction ("Initial Deposit"). The remainder of the nonrecurring charges and fees shall be deposited into the escrow account upon completion of the construction. Upon resolution of the dispute, the escrow agent shall distribute amounts in the account in accordance with the resolution of such dispute and any interest that has accrued with respect to amounts in the account shall be distributed proportionately to the Parties. U S WEST shall complete installation pursuant to the AT&T Request for Collocation within a maximum of three (3) months after the Initial Payment or Initial Deposit for physical or virtual collocation. If there is a dispute between USWEST and AT&T regarding the amount of any nonrecurring charges and fees, such dispute shall be resolved in accordance with Section 27 above. The pendency of any such dispute shall not affect the obligation of USWEST to complete collocation within the installation intervals described above.

#### 41. Technical References - Collocation

Subject to Sections 1.3.1 and 1.3.2 of this Part A of this Agreement, USWEST shall provide collocation in accordance with the following standards:

- 41.1 Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electric Cables, Field Splices, and Connections for Nuclear Power Generating Stations;
- 41.2 National Electrical Code (NEC), use most recent issue;
- 41.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2 (Bellcore, January 1989);
- 41.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988;
- 41.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140- Volt Central Office Power Plant Rectifiers, Issue 1 (Bellcore, May 1985);
- 41.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985);
- 41.7 TR-NWT-000154, Generic Requirements for 24-, 48-, 130, and 140- Volt Central Office Power Plant Control and Distribution Equipment, Issue 2 (Bellcore, January 1992);
- 41.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2 (Bellcore, July 1992);
- 41.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1 (Bellcore, December 1991);
- 41.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993; and
- 41.11 Underwriters' Laboratories Standard, UL 94.

### 42. Number Portability

42.1 Interim Number Portability (INP)

## 42.1.1 General Terms

- (a) The Parties shall provide Interim Number Portability (INP) on a reciprocal basis to the extent technically feasible.
- (b) Until permanent number portability is implemented by the industry pursuant to regulations issued by the FCC or the Commission, the Parties agree to provide INP to each other through Remote Call Forwarding, Direct Inward Dialing, or other appropriate means as agreed to by the Parties.
- (c) Once permanent number portability is implemented pursuant to FCC or Commission regulation, either Party may withdraw, at any time and at its sole discretion, its INP offerings, subject to advance notice to the other Party with sufficient time to allow for coordination to allow the seamless and

transparent conversion of INP Customer numbers to permanent number portability. Upon implementation of permanent number portability pursuant to FCC regulations, both Parties agree to conform and provide such permanent number portability. The Parties agree to expeditiously convert Customers from interim number portability to permanent number portability, provided that the interim service is not removed until the Customer has been converted.

- (d) U S WEST will update and maintain its Line Information Database ("LIDB") listings for numbers retained by AT&T and its Customer, and restrict or cancel calling cards associated with these forwarded numbers as directed by AT&T. Further, U S WEST will not block third party and collect calls to those numbers unless requested by AT&T.
- (e) The ordering Party shall specify, on a per telephone number basis, which method of INP is to be employed and the providing Party shall provide such method to the extent technically feasible.
- (f) Where either Party has activated an entire NXX, or activated a substantial portion of an NXX with the remaining numbers in that NXX either reserved for future use or otherwise unused, if these Customer(s) choose to receive service from the other Party, the first Party shall cooperate with the second Party to have the entire NXX reassigned in the LERG (and associated industry databases, routing tables, etc.) to an End Office operated by the second Party. Such transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry lead-times for movement of NXXs from one switch to another.

#### 42.1.2 Description Of Service

- (a) Interim Number Portability Service ("INP") is a service arrangement that can be provided by U S WEST to AT&T or by AT&T to U S WEST.
- (b) INP applies to those situations where an end-user Customer elects to change service providers, and such Customer also wishes to retain its existing or reserved telephone number(s). INP consists of providing the capability to route calls placed to telephone numbers assigned to one Party's switches to another Party's switches.
- (c) INP is available as INP-Remote Call Forwarding ("INP-RCF") permitting a call to a U S WEST assigned telephone number to be translated to AT&T's dialable local number. AT&T may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible on a per path basis. AT&T will need to specify the number of simultaneous calls to be forwarded for each number ported.
- (d) DID is another INP method that makes use of direct inward dialing trunks. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between the U S WEST end office and the AT&T switch. Traffic on these trunks cannot overflow to other trunks, so the number of trunks shall be conservatively engineered by U S WEST. Also, inter-switch signaling is

usually limited to multi-frequency (MF). This precludes passing Calling Line ID to the AT&T switch.

- (e) RI-PH will route a dialed call to the USWEST switch associated with the NXX of the dialed number. The USWEST switch shall then insert a prefix onto the dialed number which identifies how the call is to be routed to AT&T. The prefixed dialed number is transmitted to the USWEST tandem switch to which AT&T is connected. Route indexing is only available with seven (7) digit local dialing.
- (f) The prefix is removed by the operation of the tandem switch and the dialed number is routed to AT&T's switch so the routing of the call can be completed by AT&T.
  - i. DN-RI is a form of RI-PH that requires direct trunking between the USWEST switch to which the ported number was originally assigned and the AT&T switch to which the number has been ported. The USWEST switch shall send the originally dialed number to the AT&T switch without a prefix.
  - ii. U S WEST shall provide RI-PH or DN-RI on an individual telephone number basis, as designated by AT&T. Where technically feasible, calls to ported numbers are first directed to the AT&T switch over direct trunks but may overflow to tandem trunks if all trunks in the direct group are occupied.
  - iii. For both RI-PH and DN-RI the trunks used may, at AT&T's option, be the same as those used for exchange of other local traffic with U S WEST. At AT&T's option, the trunks shall employ SS7 or in band signaling and may be one way or two way.
- (g) INP is subject to the following restrictions:
  - i. An INP telephone number may be assigned by AT&T only to AT&T's Customers located within U S WEST's local calling area and toll rating area that is associated with the NXX of the ported number. This is to prevent the possibility of Customers using number portability to extend the local calling area.
  - ii. INP is applicable only if AT&T is engaged in a reciprocal traffic exchange arrangement with U S WEST.
  - iii. INP is not offered for NXX Codes 555, 976, 960 and 1+ sent-paid telephones, and Service Access Codes (i.e., 500, 700, 800/888, 900). INP is not available for FGA seven-digit numbers (including foreign exchange (FEX), FX and FX/ONAL and foreign Central Office service).. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.

- iv. The ported telephone number will be returned to the switch which originally had the ported number when the ported service is disconnected. The normal intercept announcement will be provided by the porting company for the period of time until the telephone number is reassigned.
- v. Within thirty (30) days after the Effective Date of this Agreement, U S WEST shall provide AT&T a list of those features that are not available for INP telephone numbers due to technical limitations.

#### 42.1.3 Ordering and Maintenance

- (a) AT&T is responsible for all direct interactions with AT&T's end users with respect to ordering and maintenance.
- (b) U S WEST shall exchange with AT&T SS7 TCAP messages as required for the implementation of Custom Local Area Signaling Services (CLASS) or other features available in the U S WEST network.
- (c) Each Party's designated INP switch must return answer and disconnect supervision to the other Party's switch.
- (d) U S WEST shall disclose to AT&T any technical or capacity limitations that would prevent use of a requested INP in a particular switching office.
- (e) The Parties will develop and implement an efficient deployment process to ensure call routing integrity for toll and local calls, with the objective to eliminate Customer downtime.
- (f) For INP, AT&T shall have the right to use the existing U S WEST 911 infrastructure for all 911 capabilities. When RCF is used for AT&T subscribers, both the ported numbers and shadow numbers shall be stored in the ALI databases. AT&T shall have the right to verify the accuracy of the information in the ALI databases via direct connection to the SCC ALI database pursuant to the same process and procedures SCC makes available to U S WEST.

#### 42.2 Permanent Number Portability (PNP)

- 42.2.1 Upon implementation of Permanent Number Portability (PNP) pursuant to FCC regulations, both Parties agree to conform and provide such Permanent Number Portability. To the extent consistent with the FCC rules as amended from time to time, the requirements for PNP shall include the following:
- 42.2.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC rules and regulations.
- 42.2.3 The PNP network architecture shall not subject alternate local exchange carriers to any degradation of service compared to USWEST in any relevant measure, including transmission quality, switching and transport costs, increased call set-up

- time and post-dial delay, and AT&T shall not be required to rely on the US WEST network for calls completing to its ported Customers.
- 42.2.4 When an office is equipped with PNP, in accordance with the procedures specified by the North American Numbering Council, the NXXs in the office shall be defined as portable and translations will be changed in the Parties' switches to open those NXXs for database queries.
- 42.2.5 When an NXX is defined as portable, it shall also be defined as portable in all PNP-capable offices which have direct trunks to the given switch.
- 42.2.6. Upon introduction of PNP in an Metropolitan Statistical Area ("MSA"), the applicable switches will be converted according to a published schedule with no unreasonable delay. All portable NXXs shall be recognized as portable, with queries launched from these switches.
- 42.2.7 Prior to implementation of PNP, the Parties agree to develop, implement, and maintain efficient methods to maintain 911 database integrity when a subscriber ports to another service provider. The Parties agree that the Customer should not be dropped from the 911 database during the transition.
- 42.2.8 When a subscriber ports to another service provider and has previously secured a reservation of line numbers from the donor provider for possible activation at some future point, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber. So long as AT&T maintains the reserved numbers, U S WEST shall not reassign said numbers. The Parties will allocate the revenue generated from number reservations in accordance with a schedule to be mutually agreed upon by the Parties within ninety (90) days of the Effective Date of this Agreement.
- 42.2.9 During the process of porting a subscriber, the donor service provider shall implement the 10-Digit trigger feature, when the technology is made available in each switch in accordance with the schedules adopted by the FCC. When the donor provider receives the porting request, the unconditional trigger shall be applied to the subscriber's line at the time that has been agreed to via the Western Region LNP Operations Guidelines in order to overcome donor network time delays in the disconnection of the subscriber. Alternatively, when an activation notice is sent to an NPAC to trigger a broadcast to service provider databases, the donor switch shall have its translations changed to disconnect-the subscriber's line within thirty (30) minutes or less after the donor network Local SMS's has received the broadcast. Porting requests that require coordination between service providers, in accordance with the guidelines, will be handled on a case-by-case basis and will not be covered by the above.

# 42.2.10 Both AT&T and U S WEST shall:

- (a) support all emergency and operator services.
- (b) use scarce numbering resources efficiently and administer such resources in a competitively neutral manner.

- (c) jointly cooperate with each other to provide the information necessary to rate and bill all types of calls.
- (d) jointly cooperate with each other to apply PNP consistently on a nationwide basis, and in accordance with all FCC directives.
- 42.2.11 A ten-digit code, consistent with the North American Numbering Plan, shall be used as a network address for each switch that terminates subscriber lines, i.e., an end office. This address shall support existing six-digit routing and may be implemented without changes to existing switch routing algorithms. In existing end offices, this address shall be selected from one of its existing NPA-NXXs. New end offices shall be assigned an address through normal administrative processes.
- 42.2.12 PNP employs an "N-1" (N minus 1) Query Strategy for interLATA or intraLATA toll calls, by which the originating carrier will pass the call to the appropriate toll carrier who will perform a query to an external routing database and efficiently route the call to the appropriate terminating local carrier either directly or through an access tandem office.
- 42.2.13 U S WEST shall furnish AT&T with the first six (6) digits of the originating address when it supplies AT&T with the Jurisdiction Information Parameter for the originating address message.
- 42.2.14 U S WEST agrees to begin the introduction of PNP to end user subscribers who may begin changing local service providers and retaining their existing telephone number based on the time line set out by the FCC in its Telephone Number Portability Order (CC Docket No. 95-116), or in accordance with a Commission order if such time for introduction of PNP set by the Commission is earlier than would result under the FCC Order.
- 42.2.15 The generic requirements for the PNP alternative will be implemented in accordance with industry-standard specifications.
- 42.2.16 For a local call to a ported number, the originating carrier is the "N-1" carrier. It will perform an external database query as soon as the call reaches the first PNP-capable switch in the call path and pass the call to the appropriate terminating carrier. A PNP-capable originating switch shall query on a local call to a portable NXX as soon as it determines that it (the originating switch) does not serve the dialed number.
- 42.2.17 U S WEST shall be the default carrier for database queries where AT&T is unable to perform its own query due to abnormal conditions. AT&T shall be the default carrier for database queries where U S WEST is unable to perform its own query due to abnormal conditions.
- 42.2.18 U S WEST will provide AT&T PNP for subscribers moving to a different location, or staying at the same location, within the same rate center area.
- 42.2.19 U S WEST will work cooperatively with other local service providers to establish the Western Region Number Portability Administration Center/Service Management System (SMS). The SMS shall be administered by a neutral third party to provide

for the efficient porting of numbers between carriers. There must be one (1) exclusive NPAC per portability State or region, and USWEST shall provide all information uploads and downloads regarding ported numbers to/from, respectively, the exclusive NPAC. USWEST and AT&T shall cooperate to facilitate the expeditious deployment of PNP through the process prescribed by the FCC, including, but not limited to, participation in the selection of a neutral third party and development of SMS, as well as SMS testing for effective procedures, electronic system interfaces, and overall readiness for use consistent with that specified for provisioning in this Agreement.

## 42.3 Requirements for INP and NP

42.3.1 [Intentionally left blank for numbering consistency]

#### 42.3.2 Cut-Over Process

The Parties shall cooperate in the process of porting numbers from one carrier to another so as to limit service outage for the ported subscriber. This shall include, but not be limited to, each Party updating its respective network element translations within fifteen (15) minutes following notification by the industry SMS, or ported-to local service provider, and deploying such temporary translations as may be required to minimize service outage, e.g., unconditional triggers. In addition, AT&T shall have the right to determine who initiates the order for INP in specific cut-over situations. The time frames in this paragraph shall be pursuant to Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.99, January 6, 1997 and subsequent versions which may be adopted from time to time. The Parties shall cooperate to review and, if necessary, adjust the above time frame based on their actual experiences.

#### 42.3.3 Testing

U S WEST and AT&T shall cooperate in conducting AT&T's testing to ensure interconnectivity between systems. U S WEST shall inform AT&T of any system updates that may affect the AT&T network and U S WEST shall, at AT&T's request, perform tests to validate the operation of the network. Additional testing requirements may apply as specified by this Agreement.

#### 42.3.4 Engineering and Maintenance

- (a) U S WEST and AT&T will cooperate to ensure that performance of trunking and signaling capacity is engineered and managed at levels which are at least the same level of service as provided by U S WEST to its subscribers and to ensure effective maintenance testing through activities such as routine testing practices, network trouble isolation processes and review of operational elements for translations, routing and network fault isolation.
- (b) Additional specific engineering and maintenance requirements shall apply as specified in this Agreement.

## 42.3.5 Recording and Billing

The Parties shall provide each other with accurate billing and subscriber account record exchange data necessary for billing their subscribers whose numbers have been ported.

# 42.3.6 Operator Services and Directory Assistance

With respect to operator services and directory assistance associated with NP for AT&T subscribers, U S WEST shall provide the following:

- (a) While INP is deployed and prior to conversion to PNP:
  - i. The Parties acknowledge that technology, as of the Effective Date of this Agreement, does not permit the provision of BLV/BLI to ported numbers. When such becomes available in the US WEST network, such technology shall be made available to AT&T.
  - ii. U S WEST shall allow AT&T to order provisioning of Telephone Line Number (TLN) calling cards and Billed Number Screening (BNS), in its LIDB, for ported numbers, as specified by AT&T. U S WEST shall continue to allow AT&T access to its LIDB. Other LIDB provisions are specified in this Agreement.
  - iii. Where U S WEST has control of Directory Listings for NXX codes containing ported numbers, U S WEST shall maintain entries for ported numbers as specified by AT&T in accordance with the Listings Section of this Agreement.

### (b) When PNP is in place:

- The provisions in Section 42.3.6 preceding, shall apply when PNP is in place.
- If Integrated Services Digital Network User Part (ISUP) signaling is used, US WEST shall provide the Jurisdiction Information Parameter in the SS7 Initial Address Message. (See Generic Switching and Signaling Requirements for Number Portability, Issue 1.0, February 12, 1996 (Editor - Lucent Technologies, Inc.)).
- iii. The Parties shall provide, when received from the NPAC, a 10-Digit Global Title Translation (GTT) Node for routing queries for TCAP-based operator services (e.g., LIDB). The acquiring company will provide the GTT to the NPAC. The NPAC will distribute this information to the donor company and all other parties.
- iv. U S WEST OSS shall meet all requirements specified in "Generic Operator Services Switching Requirements for Number Portability," Issue 1.1, June 20, 1996, as updated from time to time.

# 43. Dialing Parity

- The Parties shall provide dialing parity to each other as required under Section 251(b)(3) of the Act or state law or regulation as appropriate.
- 43.2 US WEST shall ensure that all AT&T Customers experience the same dialing parity as similarly-situated Customers of US WEST services, such that, for example, for all call types: (a) an AT&T Customer is not required to dial any greater number of digits than a similarly-situated US WEST Customer, and (b) the AT&T Customer may retain its local telephone number, so long as the Customer continues receiving service in the same central office serving area.

# 44. Directory Listings

# 44.1 Directory Listings General Requirements

- 44.1.1 This Section 44 pertains to Directory Listings requirements for the appearance of AT&T end user Directory Listings in directory assistance service or directory product.
- 44.1.2 U S WEST shall include in its master Directory Listing database all list information for AT&T Customers.
- 44.1.3 U S WEST shall not sell or license, nor allow any third party, the use of AT&T Customer Listings without the prior written consent of AT&T. U S WEST shall not disclose nor allow any third party to disclose non-listed name or address information for any purpose other than what may be necessary to complete directory distribution.
- 44.1.4 AT&T Customer Listings in the USWEST Directory Assistance database and Directory Listing database shall be co-mingled with Listings of USWEST and other CLEC Customers.
- 44.1.5 Each AT&T Customer Primary Listing shall be provided, at no charge, the same white page listings that U S WEST provides its Customers.
- 44.1.6 Each AT&T business Customer Primary Listing shall be provided, at no charge, the same yellow page classified courtesy Listings that USWEST provides its Customers.
- 44.1.7 U S WEST shall also ensure that its directory publisher publishes all types of Listings for AT&T Customers that are available to U S WEST Customers under the same terms, and conditions, including, but not limited to:
  - (a) Foreign listings
  - (b) Reference listings
  - (c) Information listings
  - (d) Alternate call listings
  - (e) Multi-line listings
  - (f) Multi-line/Multi-owner listings

- 44.1.8 AT&T end user Listings properly identified by AT&T as State, Local, and Federal government Listings shall be appropriately coded in the U S WEST Directory Listing database. U S WEST will provide government code information to AT&T.
- 44.1.9 The listing and handling of AT&T listed and non-listed telephone numbers shall be at least at parity with that provided by U S WEST to its own Customers, including AT&T customers who have ported telephone numbers from U S WEST.
- 44.1.10 U S WEST shall ensure that its directory publisher publishes AT&T sales, service, billing, and repair information for business and residential Customers, along with the AT&T logo in the customer information/guide pages of each directory at no charge to AT&T.
- 44.1.11 U S WEST is responsible for maintaining Listings, including entering, changing, correcting, rearranging and removing listings in accordance with AT&T orders. Upon request, and at least one (1) month prior to a given white page directory close, a method of reviewing and correcting Listings will be provided.
- 44.1.12 For white pages and yellow pages advertising, U S WEST shall ensure that (a) U S WEST's directory publisher sell such advertising on a nondiscriminatory basis to AT&T Customers, (b) charges for such advertising will be billed by U S WEST's directory publisher in the same manner as it bills for U S WEST's customers' advertisements, and (c) AT&T shall receive commissions or other compensation from U S WEST's directory publisher on all compensation generated by such advertising at no less than the commission or compensation rate paid to U S WEST or any of its Affiliates.<sup>22</sup>
- 44.1.13 U S WEST will permit AT&T Customers to place orders for Premium Listings and privacy listings. AT&T will be charged for Premium Listings and privacy listings at U S WEST's general exchange tariff rates less the wholesale discount rate. The Premium and privacy listing charges will be billed to AT&T and itemized at the telephone number sub-account level.
- 44.1.14 U S WEST shall ensure a third party distributes appropriate alphabetical and classified directories (white and yellow pages) and recycling services to AT&T Customers at parity with U S WEST end users, including providing directories, a) upon establishment of new service; b) during annual mass distribution; and c) upon Customer request.
- 44.1.15 At no charge, U S WEST shall ensure that each directory cover indicates inclusion of AT&T customer listings.<sup>23</sup>
- 44.1.16 U S WEST will provide the option of having CENTREX users listed when AT&T purchases CENTREX type services for resale.

Procedural Order, July 14, 1997, pages 6-8.

Arizona Bench Order, May 29, 1997, p. 1600, Procedural Order, July 14, 1997 at page 9.

44.1.17 AT&T shall receive the same treatment as U S WEST receives with respect to white and yellow page matters.<sup>24</sup>

#### 44.2 Scope

44.2.1 AT&T grants U S WEST a non-exclusive license to incorporate Listings information into its Directory Assistance database. AT&T shall select one of two options for U S WEST's use of Listings and dissemination of Listings to third parties.

#### EITHER:

(a) Treat the same as U S WEST's end user listings - No prior authorization is needed for U S WEST to release Listings to directory publishers or other third parties. U S WEST will incorporate Listings information in all existing and future Directory Assistance applications developed by U S WEST. AT&T authorizes U S WEST to sell and otherwise make Listings available to directory publishers. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.

#### OR:

- (b) Restrict to U S WEST's Directory Assistance services -- Prior authorization required from AT&T for all other uses. AT&T makes its own, separate agreements with U S WEST, third Parties and directory publishers for all uses of its listings beyond DA. U S WEST will sell or provide Listings to directory publishers (including U S WEST's publisher affiliate) or other third Parties only after the third party presents proof of AT&T's authorization. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.
- (c) U S WEST shall be entitled to retain all revenue associated with any sales pursuant to subparagraphs (a) and (b) above.<sup>25</sup>
- 44.3 U S WEST will take reasonable steps in accordance with industry practices to accommodate non-published and non-listed Listings provided that AT&T has supplied U S WEST the necessary privacy indicators on such Listings.

# 44.4 AT&T Responsibilities

- 44.4.1 AT&T agrees to provide to USWEST its end user names, addresses and telephone numbers in a standard mechanized format, as utilized by USWEST.
- 44.4.2 AT&T will supply its ACNA/CIC or CLCC/OCN, as appropriate, with each order to provide U S WEST the means of identifying listings ownership.

Arizona Bench Order, May 29, 1997, p. 1600, Procedural Order, July 14, 1997 at page 9.

Procedural order, July 14, 1997 at page 10.

- 44.4.3 AT&T represents the end user information provided to U S WEST is accurate and correct. AT&T further represents that it has reviewed all listings provided to U S WEST, including end user requested restrictions on use such as non-published and non-listed.
- 44.4.4 AT&T is responsible for dealings with, and on behalf of, AT&T's end users on the following subjects:
  - a) All end user account activity, e.g., end user queries and complaints.
  - b) All account maintenance activity, e.g., additions, changes, issuance of orders for Listings to U S WEST.
  - c) Determining privacy requirements and accurately coding the privacy indicators for AT&T's end user information. If end user information provided by AT&T to U S WEST does not contain a privacy indicator, no privacy restrictions will apply.
- 45. [Intentionally left blank for numbering consistency]
- 46.26 U S WEST Dex Issues

U S WEST and AT&T agree that certain issues, such as yellow page advertising, directory distribution, access to call guide pages, and yellow page listings, will be the subject of negotiations between AT&T and directory publishers, including U S WEST Dex. U S WEST acknowledges that AT&T may request U S WEST to facilitate discussions between AT&T and U S WEST Dex.

- 47. Access to Poles, Ducts, Conduits, and Rights of Way
  - 47.1<sup>27</sup> Each Party shall provide the other Party nondiscriminatory access to poles, ducts, rights-of-way and conduits it controls on terms, conditions and prices as described herein. While the language in Section 47 describes the provision of poles, ducts, rights-of-way and conduits by U S WEST to AT&T, the language in this Section shall apply reciprocally to the provision by AT&T to U S WEST of poles, ducts, rights-of-way and conduits not used by AT&T to provide exclusively long distance services.<sup>28</sup>
  - 47.2 [Intentionally left blank for numbering consistency]
  - 47.3 Definitions

"Poles, ducts, conduits and ROW" refer to all the physical facilities and legal rights which provide for access to pathways across public and private property. These include poles, pole attachments, ducts, innerducts, conduits, building entrance facilities, building entrance

MCIm Order, p. 23 at Issue 36 and AT&T Order Issue 70.

MCIm Order, p. 22 at Issue 35.

MCIm Order, p. 22 at Issue 35; Procedural Order, July 14, 1997 at pages 10-11.

links, equipment rooms, remote terminals, cable vaults, telephone closets, building risers, rights-of-way, or any other requirements needed to create pathways. These pathways may run over, under, across or through streets, traverse private property, or enter multi-unit buildings. A Right-of-Way ("ROW") is the right to use the land or other property owned, leased, or controlled by any means by U S WEST to place poles, ducts, conduits and ROW or to provide passage to access such poles, ducts, conduits and ROW. A ROW may run under, on, or above public or private property (including air space above public or private property) and shall include the right to use discrete space in buildings, building complexes, or other locations.

## 47.4 Requirements

- 47.4.1 U S WEST shall make poles, duct, conduits and ROW available to AT&T upon receipt of a request for use within the time periods provided in this Section, providing all information necessary to implement such use and containing rates, terms and conditions, including, but not limited to, maintenance and use in accordance with this Agreement and at least equal to those which it affords itself, its Affiliates and others. Other users of these facilities, including U S WEST, shall not interfere with the availability or use of the facilities by AT&T.
- 47.4.2 Within ten (10) Business Days of AT&T's request for specific poles, ducts, conduits, or ROW, U S WEST shall provide any information in its possession or available to it regarding the environmental conditions of such requested poles, ducts, conduits or ROW route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in U S WEST's possession or files, or the possession of an agent, contractor, employee, lessor, or tenant of U S WEST's that holds such information on U S WEST's behalf. If the poles, ducts, conduits or ROW contain such environmental contamination, making the placement of equipment hazardous, U S WEST shall offer alternative poles, ducts, conduits or ROW for AT&T's consideration. U S WEST shall allow AT&T to perform any environmental site investigations, including, but not limited to, Phase I and Phase II environmental site assessments, as AT&T may deem to be necessary.
- 47.4.3 US WEST shall not prevent or delay any third party assignment of ROW to AT&T.
- 47.4.4 US WEST shall offer the use of such poles, ducts, conduits and ROW it has obtained from a third party to AT&T, to the extent such agreement does not prohibit US WEST from granting such rights to AT&T. They shall be offered to AT&T on the same terms as are offered to US WEST. US WEST shall exercise its eminent domain authority when necessary to expand an existing ROW over private property in order to accommodate a request from AT&T for access to such ROW.<sup>29</sup> AT&T shall reimburse US WEST for US WEST's reasonable costs, if any, incurred as a result of the exercise of its eminent domain authority on behalf of AT&T in accordance with the provisions of this paragraph.
- 47.4.5 U S WEST shall provide AT&T equal and non-discriminatory access to poles, ducts, conduit and ROW and any other pathways on terms and conditions equal to that

AT&T Order, p. 30 at Issue 55.

provided by USWEST to itself or to any other Person. Further, USWEST shall not preclude or delay allocation of these facilities to AT&T because of the potential needs of itself or of any other Person, except a maintenance spare may be retained as described below.

- 47.4.6 U S WEST shall not attach, or permit other entities to attach facilities on, within or overlashed to existing AT&T facilities without AT&T's prior written consent.
- 47.4.7 US WEST agrees to provide current detailed engineering and other plant records and drawings for specific requests for poles, ducts, conduit and ROW, including facility route maps at a city level, and the fees and expenses incurred in providing such records and drawings, on the earlier of twenty (20) Business Days from AT&T's request or the time within which US WEST provides this information to itself or any other Person. Such information shall be of equal type and quality as that which is available to US WEST's own engineering and operations staff. US WEST shall also allow personnel designated by AT&T to jointly examine with US WEST personnel, at no cost to AT&T for such personnel, such engineering records and drawings for a specific routing at US WEST Central Offices and US WEST Engineering Offices upon ten (10) days' written notice to US WEST. US WEST acknowledges that the request for information and the subject matter related to the request made under this Section shall be treated as Proprietary Information.
- 47.4.8 U S WEST shall provide to AT&T a Single Point of Contact for negotiating all structure lease and ROW arrangements.
- 47.4.9 US WEST shall provide information regarding the availability and condition of poles, ducts, conduit and ROW within five (5) Business Days of AT&T's request if the information then exists in US WEST's records (a records based answer) and within twenty (20) Business Days of AT&T's request if US WEST must physically examine the poles, ducts, conduits and ROW (a field based answer) ("Request"). AT&T shall have the option to be present at the field based survey and US WEST shall provide AT&T at least twenty-four (24) hours' notice prior to the start of such field survey. During and after this period, US WEST shall allow AT&T personnel to enter manholes and equipment spaces and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure. US WEST shall send AT&T a written notice confirming availability pursuant to the Request within such twenty (20) day period ("Confirmation").
- 47.4.10 Reservation. For the period beginning at the time of the Request and ending ninety (90) days following Confirmation, U S WEST shall reserve such poles, ducts, conduit and ROW for AT&T that AT&T may reasonably request. AT&T shall pay an appropriate reservation fee mutually agreed upon by the Parties for such reservation and shall elect whether to accept the poles, ducts, conduits, or ROW within the ninety (90) day period following Confirmation. AT&T may accept such facilities by sending written notice to U S WEST ("Acceptance").

MCIm Order, p. 22, Issue 35.

- 47.4.10.1 Right of First Refusal. During the Reservation Period, if another party, including US WEST, makes a bona fide and good faith request for the use of any poles, ducts, conduits or ROW that AT&T has previously reserved, AT&T shall have a "right of first refusal" over these facilities. If AT&T chooses to exercise its right of first refusal, it shall do so by providing US WEST written notice of same within ten (10) Business Days following receipt of written notice from US WEST advising AT&T. of the bona fide and good faith request.
- 47.4.10.2 Exercise of Right of First Refusal/Reservation. To ensure proper use of reserved facilities, after the expiration of the reservation period or upon exercise of its right of first refusal, whichever occurs earlier, AT&T must begin paying the approved rate for access (whether or not it has actually installed conduit or cable) and shall begin construction on the facility within six (6) months, or release its reservation.
- 47.4.11 Reservation. After Acceptance by AT&T, AT&T shall have six (6) months to begin attachment and/or installation of its facilities to the poles, ducts, conduit and ROW or request US WEST to begin make ready or other construction activities. Any such construction, installation or make ready by AT&T shall be completed by the end of one (1) year after Acceptance. AT&T shall not be in default of the 6-month or 1-year requirement above if such default is caused in any way by any action, inaction or delay on the part of US WEST or its Affiliates or subsidiaries.
- 47.4.12 Make Ready. U S WEST shall rearrange, modify and/or make ready existing poles, ducts, conduit and ROW where necessary and feasible to provide space for AT&T's requirements. Subject to the requirements above, the Parties shall endeavor to mutually agree upon the time frame for the completion of such work within five (5) days following AT&T's request; provided, however, that any such work required to be performed by U S WEST shall be completed within sixty (60) days or a reasonable period of time based on standard construction intervals in the industry, unless otherwise agreed by AT&T in writing.
- 47.4.13 New Construction. After Acceptance, USWEST shall complete any new construction, relocation or installation of poles, ducts, conduits or ROW required to be performed by USWEST or any USWEST construction, relocation or installation requested by AT&T within a reasonable period of time based on standard construction intervals in the industry or sixty (60) days after obtaining all governmental authority or permits necessary to complete such construction, relocation or installation. If USWEST anticipates that construction, relocation or installation will go beyond standard industry intervals or the sixty (60) day period, USWEST shall immediately notify AT&T and the Parties shall mutually agree on a completion date.
- 47.4.14 AT&T shall begin payment for the use of newly constructed poles, ducts, conduit, and ROW upon completion of such construction and installation and confirmation by appropriate testing methods that the facilities are in a condition ready to operate

- in AT&T's network or upon use (other than for testing) by AT&T, whichever is earlier.
- 47.4.15 AT&T shall make payment for construction, relocation, rearrangements, modifications and make ready in accordance with Section 3.5 of Attachment 1 of this Agreement.
- 47.4.16 AT&T shall begin payment for the use of existing poles, ducts, conduit and ROW within ninety (90) days following Confirmation.<sup>31</sup>
- 47.4.17 AT&T may, at its option, install its facilities on poles, ducts, conduit and ROW and use AT&T or AT&T designated personnel to attach its equipment to such U S WEST poles, ducts, conduits and ROW.
- 47.4.18 If available, USWEST shall provide AT&T space in manholes for racking and storage of cable and other materials as requested by AT&T.
- 47.4.19 U S WEST shall rearrange, modify and/or make ready any conduit system or poles with retired cable by removing such retired cable from conduit systems or poles to allow for the efficient use of conduit space and pole space. U S WEST shall take all reasonable steps to expand its facilities to accommodate AT&T's request, and shall do so in accordance with the time frames set forth in this Section 47.32 Before denying access based on a lack of capacity, U S WEST must explore potential accommodations with AT&T.
- 47.4.20 Where U S WEST has innerducts which are not, at that time, being used or are not reserved as emergency or maintenance spare in accordance with FCC rules and regulations, U S WEST shall offer such ducts for AT&T's use.
- 47.4.21 Where a spare innerduct does not exist, U S WEST shall allow AT&T to install an innerduct in U S WEST conduit, at AT&T's cost and expense. U S WEST must review and approve any installation of innerduct in any U S WEST's duct prior to the start of construction. Such approval shall not be unreasonably delayed, withheld or conditioned. AT&T shall provide notice to U S WEST of any work activity not less than twenty-four (24) hours prior to the start of construction.
- 47.4.22 Where U S WEST has any ownership or other rights to ROW to buildings or building complexes, or within buildings or building complexes, U S WEST shall offer such ROW to AT&T.
  - (a) Subject to the approval of the building owner, if required, the right to use any available space owned or controlled by U S WEST in the building or building complex to install AT&T equipment and facilities;
  - (b) Subject to the approval of the building owner, if required, ingress and egress to such space; and

MCIm Order, p. 22 at Issue 35.

AT&T Order, Issue 54.

- (c) Subject to the approval of the building owner, if required, the right to use electrical power at parity with U S WEST's rights to such power.
- 47.4.23 Whenever U S WEST intends to modify or alter any poles, ducts, conduits or ROW which contain AT&T's facilities, U S WEST shall provide written notification of such action to AT&T so that AT&T may have a reasonable opportunity to add to or modify its facilities. AT&T shall advise U S WEST, in writing, of its intentions to add or modify the facilities within fifteen (15) Business Days of U S WEST's notification. If AT&T adds to or modifies its facilities according to this paragraph, AT&T shall bear a proportionate share of the costs incurred by U S WEST in making such facilities accessible.
- 47.4.24 AT&T shall not be required to bear any of the costs of rearranging or replacing its facilities, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any entity other than AT&T, including U S WEST.
- 47.4.25 U S WEST shall maintain the poles, ducts, conduits and ROW at its sole cost. AT&T shall maintain its own facilities installed within the poles, ducts, conduits and ROW at its sole cost. In the event of an emergency, U S WEST shall begin repair of its facilities containing AT&T's facilities within a reasonable time frame based on industry standards or a time frame requested by AT&T. If U S WEST cannot begin repair within the requested time frame, upon notice and approval of U S WEST, which approval shall not be unreasonably withheld, AT&T may begin such repairs without the presence of U S WEST personnel. AT&T may climb poles and enter the manholes, handholds, conduits and equipment spaces containing U S WEST's facilities in order to perform such emergency maintenance, but only until such time as qualified personnel of U S WEST arrives ready to continue such repairs. For both emergency and non-emergency repairs, AT&T may use spare innerduct or conduits, including the innerduct or conduit designated by U S WEST as emergency spare for maintenance purposes; provided, however, that AT&T may only use such spare conduit or innerduct for a maximum period of ninety (90) days.
- 47.4.26 In the event of a relocation necessitated by a governmental entity exercising the power of eminent domain, when such relocation is not reimbursable, all parties shall share pro rata in costs for relocating the base conduit or poles and shall each pay its own cost of cable and installation of the facilities in the newly rebuilt U S WEST poles, ducts, conduits and ROW.

# 48. Bona Fide Request Process for Further Unbundling

48.1<sup>33</sup> Any request for Interconnection or access to an unbundled Network Element not already available via price lists, tariff, or as described herein shall be treated as a "Request" under this Section.

The MCIm Order, p. 9 at Issue 10, sets forth a stricter time line for U S WEST to follow in responding to BFRs than does the following agreed-upon language. The Parties have subsequently agreed to the time frames as set forth in this Section.

- 48.2 U S WEST shall use the Bona Fide Request ("BFR") process as described in this Section 48, to determine the technical feasibility of the requested Interconnection or Network Element(s) and, for those items found to be technically feasible, to provide the terms and timetable for providing the requested items. Additionally, elements, services and functions which are materially or substantially different from those services, elements or functions already provided by U S WEST to itself, its Affiliates, Customers, or end users may, at the discretion of AT&T, be subject to this BFR. process.
- 48.3 A Request shall be submitted in writing and, at a minimum, shall include: (a) a complete and accurate technical description of each requested Network Element or Interconnection; (b) the desired interface specifications; (c) a statement that the Interconnection or Network Element will be used to provide a Telecommunications Service; (d) the quantity requested; (e) the location(s) requested; and (f) whether AT&T wants the requested item(s) and terms made generally available. AT&T may designate a Request as Confidential.
- 48.4 Within forty-eight (48) hours of receipt of a Request, U S WEST shall acknowledge receipt of the Request and review such Request for initial compliance with Subsection 48.3 above. In its acknowledgment, U S WEST shall advise AT&T of any missing information reasonably necessary to move the Request to the preliminary analysis described in Subsection 48.5 below.
- 48.5 Unless otherwise agreed to by the Parties, within thirty (30) calendar days of its receipt of the Request and all information necessary to process it, U S WEST shall provide to AT&T a preliminary analysis of the Request. As reasonably requested by AT&T, U S WEST agrees to provide status updates to AT&T. U S WEST will notify AT&T if the quote preparation fee, if any, will exceed \$5,000. AT&T will approve the continuation of the development of the quote prior to U S WEST incurring any reasonable additional expenses. The preliminary analysis shall specify whether or not the requested Interconnection or access to an unbundled Network Element is technically feasible and otherwise qualifies as a Network Element or Interconnection as defined under the Act.
  - 48.5.1 If US WEST determines during the thirty (30) day period that a Request is not technically feasible or that the Request otherwise does not qualify as a Network Element or Interconnection required to be provided under the Act, US WEST shall so advise AT&T as soon as reasonably possible of that fact, and promptly provide a written report setting forth the basis for its conclusion but in no case later than ten (10) calendar days after making such determination.
  - 48.5.2 If U S WEST determines during the thirty (30) day period that the Request is technically feasible and otherwise qualifies under the Act, it shall notify AT&T in writing of such determination, no later than ten (10) calendar days after making such determination.
  - 48.5.3 Unless otherwise agreed to by the Parties, as soon as feasible, but no more than ninety (90) calendar days after USWEST notifies AT&T that the Request is technically feasible, USWEST shall provide to AT&T a Request quote which will include, at a minimum, a description of each Interconnection and Network Element, the quantity to be provided, the installation intervals (both initial and subsequent), the impact on shared systems software interfaces, the ordering process changes, the functionality specifications, any interface specifications, and either:

- (a) the applicable rates (recurring and nonrecurring), including the amortized development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element; or
- (b) the payment for development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element and the applicable rates (recurring and nonrecurring), excluding the development costs.
- 48.5.4 The choice of using either option (a) or (b) above shall be at USWEST's sole discretion. A payment for development cost, however, is appropriate only where AT&T is the only conceivable user of the functionality (including consideration of USWEST as a potential user) or where the requested quantity is insufficient to provide amortization.
- 48.6 If U S WEST has used option (a) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, AT&T must indicate its nonbinding interest in purchasing the Interconnection or Network Element at the stated quantities and rates, cancel it Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.7 If U S WEST has used option (b) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, AT&T must either agree to pay the development costs of the Interconnection or Network Element, cancel its Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.8 If USWEST has used option (b) in its Request quote and AT&T has accepted the quote, AT&T may cancel the Request at any time, but will pay USWEST's reasonable development costs of the Interconnection or Network Element up to the date of cancellation.
- 48.9 US WEST will use reasonable efforts to determine the technical feasibility and conformance with the Act of the Request within the first thirty-two (32) days of receiving the Request. In the event US WEST has used option (b) above in its Request quote and US WEST later determines that the Interconnection or Network Element requested in the Request is not technically feasible or otherwise does not qualify under the Act, US WEST shall notify AT&T within ten (10) Business Days of making such determination and AT&T shall not owe any compensation to US WEST in connection with the Request. Any quotation preparation fees or development costs paid by AT&T to the time of such notification shall be refunded by US WEST.
- 48.10 To the extent possible, U S WEST will utilize information from previously developed BFRs to address similar arrangements in order to shorten the response times for the currently requested BFR. In the event AT&T has submitted a Request for an Interconnection or a Network Element and U S WEST determines in accordance with the provisions of this Section 48 that the Request is technically feasible, the Parties agree that AT&T's subsequent request or order for the identical type of Interconnection or Network Element shall not be subject to the BFR process. To the extent U S WEST has deployed an identical Network Element under a previous BFR, a subsequent BFR is not required. For purposes of this Section 48.10, an "identical" request shall be one that is materially identical to a previous request with respect to the information provided pursuant to Subsections (a) through (e) of Section 48.3 above.

- 48.11 In the event of a dispute under this Section 48, the Parties agree to seek expedited Commission resolution of the dispute, to be completed within twenty (20) days of U S WEST's response denying AT&T's BFR, and in no event more than thirty (30) days after the filing of AT&T's petition. Alternatively, the Parties may mutually agree to resolve any disputes under this section through the dispute resolution process pursuant to Section 27, Part A of this Agreement.
- 48.12 All time intervals within which a response is required from one Party to another under this Section 48 are maximum time intervals. The Parties agree that they will provide all responses to the other Party as soon as the Party has the information and analysis required to respond, even if the time interval stated herein for a response is not over.

#### 49. Audit Process

- 49.1 As used herein, "Audit" shall mean a comprehensive review of services performed under this Agreement. Either Party (the "Requesting Party") may perform up to three (3) Audits per 12-month period commencing with the Effective Date.
- 49.2 Upon thirty (30) days' written notice by the Requesting Party to the other Party (the "Audited Party"), the Requesting Party shall have the right, through its authorized representative, to make an Audit, during normal business hours, of any records, accounts and processes which contain information related to the services provided and performance standards agreed to under this Agreement. Within the above-described 30-day period, the Parties shall reasonably agree upon the scope of the Audit, the documents and processes to be reviewed, and the time, place and manner in which the Audit shall be performed. The Audited Party's facilities (e.g., conference rooms, telephones, copying machines).
- Each Party shall bear its own expenses in connection with the conduct of the Audit. The reasonable cost of special data extractions required by the Requesting Party to conduct the Audit will be paid for by the Requesting Party. For purposes of this Section 49.3, a "Special Data Extraction" shall mean the creation of an output record or informational report (from existing data files) that is not created in the normal course of business. If any program is developed to the Requesting Party's specifications and at the Requesting Party's expense, the Requesting Party shall specify at the time of request whether the program is to be retained by the Audited Party for reuse for any subsequent Audit. Notwithstanding the foregoing, the Audited Party shall pay all of the Requesting Party's external expenses (including, without limitation, the fees of any independent auditor), in the event an Audit results in an adjustment in the charges or in any invoice paid or payable by the Requesting Party hereunder in an amount that is, on an annualized basis, more than the greater of (a) one percent (1%) of the amount in dispute or (b) \$10,000.
- 49.4 Adjustments, credits or payments shall be made and any corrective action shall commence within thirty (30) days from the Audited Party's receipt of the final audit report to compensate for any errors or omissions which are disclosed by such Audit and are agreed to by the Parties. The highest interest rate allowable by law for commercial transactions shall be assessed and shall be computed by compounding daily from the time of the original due date of the amount of dispute.
- 49.5 Neither such right to examine and audit nor the right to receive an adjustment shall be affected by any statement to the contrary appearing on checks or otherwise.

- 49.6 This Section 49 shall survive expiration or termination of this Agreement for a period of two (2) years after expiration or termination of this Agreement.
- 49.7 All transactions under this Agreement which are over thirty-six (36) months old are no longer subject to Audit.
- 49.8 All information received or reviewed by the Requesting Party or the independent auditor in connection with the Audit is to be considered Proprietary Information as defined by this Agreement. The Audited Party reserves the right to require any non-employee who is involved directly or indirectly in any Audit or the resolution of its findings as described above to execute a nondisclosure agreement satisfactory to the Audited Party. To the extent an Audit involves access to information of third parties, the Audited Party will aggregate such competitors' data before release to the Requesting Party, to insure the protection of the proprietary nature of information of other competitors. To the extent a competitor is an Affiliate of the Audited Party (including itself and its subsidiaries), the Parties shall be allowed to examine such Affiliate's disaggregated data, as required by reasonable needs of the Audit.
- An "Examination" shall mean an inquiry reasonably requested by either Party into a specific element of or process where the requesting Party raises a dispute concerning services performed by the other Party under this Agreement and such dispute has not been resolved through the escalation process described in this Agreement. Only that information that is necessary to resolve the dispute in issue must be provided in the course of an Examination and the total time involved in an Examination for each Party may not exceed three (3) people for three (3) days. Appropriate provisions of this Section 49 that apply to Audits shall also apply to Examinations, except that either Party may conduct only a total of nine (9) Examinations and Audits per year, with a maximum of three (3) Audits per year.

# 50. Miscellaneous Services

- 50.1 Basic 911 and E911 General Requirements
  - 50.1.1 Basic 911 and E911 provides a caller access to the appropriate emergency service bureau by dialing a 3-digit universal telephone number (911). Basic 911 and E911 access from Local Switching shall be provided to AT&T in accordance with the following:
  - 50.1.2 Each Party will be responsible for those portions of the 911 System for which it has reasonable control, including any necessary maintenance to each Party's portion of the 911 System.
  - 50.1.3 E911 shall provide additional routing flexibility for 911 calls. E911 shall use Customer data, contained in the Automatic Location Identification/Data Management System ("ALI/DMS"), to determine to which Public Safety Answering Point (PSAP) to route the call.

Arizona Bench Order, May 29, 1997 Hearing, p.1613.

- 50.1.4 If available in the USWEST network, USWEST shall offer a third type of 911 service, S911. All requirements for E911 also apply to S911 with the exception of the type of signaling used on the interconnection trunks from the local switch to the E911 Tandem.
- 50.1.5 Basic 911 and E911 functions provided to AT&T shall be at least at parity with the support and services that USWEST provides to its Customers for such similar functionality.
- 50.1.6 Basic 911 and E911 access from Local Switching shall be provided to AT&T in accordance with the following:
  - 50.1.6.1 U S WEST shall conform to all state regulations concerning emergency services.
  - 50.1.6.2For E911 provided to resold lines or in association with unbundled switching, U S WEST shall use its service order process to update and maintain Customer information in the ALI/DMS data base. Through this process, U S WEST shall provide and validate Customer information resident or entered into the ALI/DMS data base.
- 50.1.7 U S WEST shall provide for overflow 911 traffic consistent with U S WEST policy and procedure.
- 50.1.8 Basic 911 and E911 access from the AT&T local switch shall be provided to AT&T in accordance with the following:
  - 50.1.8.1 If required by AT&T, U S WEST shall interconnect direct trunks from the AT&T network to the E911 Tandem for connection to the PSAP. Such trunks to the E911 Tandem may alternatively be provided by AT&T.
  - 50.1.8.2In government jurisdictions where USWEST has obligations under existing agreements as the primary provider of the 911 System to the county, AT&T shall participate in the provision of the 911 System as follows:
    - (a) Each Party shall be responsible for those portions of the 911 System for which it has control, including any necessary maintenance to each Party's portion of the 911 System.
    - (b) USWEST shall be responsible for maintaining the E-911 database.
  - 50.1.8.3 If a third party is the primary service provider to a government agency, AT&T shall negotiate separately with such third party with regard to the provision of 911 service to the agency. All relations between such third party and AT&T are totally separate from this Agreement and U S WEST makes no representations on behalf of the third party.
  - 50.1.8.4If AT&T or an Affiliate is the primary service provider to a government agency, AT&T and U S WEST shall negotiate the specific provisions

- necessary for providing 911 service to the agency and shall include such provisions in an amendment to this Agreement.
- 50.1.8.5 Interconnection and database access shall be priced as specified in Attachment 1 to this Agreement or at any rate charged to other interconnected carriers, whichever is lower.
- 50.1.8.6AT&T will separately negotiate with each county regarding the collection and reimbursement to the county of applicable Customer taxes for 911 service.
- 50.1.8.7U S WEST shall comply with established, competitively neutral intervals for installation of facilities, including any collocation facilities, diversity requirements, etc.
- 50.1.8.8 In a resale situation, where it may be appropriate for U S WEST to update the ALI database, U S WEST shall update such database with AT&T data in an interval no less than is experienced by U S WEST Customers, or than for other carriers, whichever is faster, at no additional cost.
- 50.1.9 The following are Basic 911 and E911 Database Requirements:
  - 50.1.9.1 The ALI database shall be managed by U S WEST, but is the property of U S WEST and any participating telephone company and CLEC for those records provided by the company.
  - 50.1.9.2 U S WEST, or its agent, will be responsible for maintaining the E-911 Data Base. U S WEST, or its agent, will provide a copy of the Master Street Address Guide ("MSAG"), and periodic updates, to AT&T.
  - 50.1.9.3 Copies of the MSAG shall be provided within twenty-one (21) calendar days from the time requested and shall be provided on diskette, magnetic tape, or in a format suitable for use with desktop computers.
  - 50.1.9.4 AT&T assumes all responsibility for the accuracy of the data that AT&T provides to U S WEST for MSAG preparation and E-911 Database operation.
  - 50.1.9.5 AT&T shall be solely responsible for providing AT&T database records to US WEST for inclusion in US WEST's ALI database on a timely basis.
  - 50.1.9.6 AT&T will provide end user data to the U S WEST ALI database that are Master Street Address Guide (MSAG) valid.
  - 50.1.9.7 AT&T will update its end user records provided to the U S WEST ALI database to agree with the 911 MSAG standards for its service areas.
  - 50.1.9.8 USWEST and AT&T shall arrange for the automated input and periodic updating of the E911 database information related to AT&T

end users for resold lines in accordance with Section 10.1 of Attachment 2 to this Agreement. AT&T may request, through the BFR process, similar arrangements for AT&T customers served on a non-resale basis. USWEST will furnish AT&T any variations to NENA recommendations required for ALI database input. The cost of magnetic tape transfer shall be borne by AT&T.

- 50.1.9.9 USWEST and AT&T shall arrange for the automated input and periodic updating of the E911 database information related to AT&T end users. For resold services, USWEST shall work cooperatively with AT&T to ensure the accuracy of the data transfer by verifying it against the Master Street Address Guide (MSAG). For AT&T's customers served by unbundled Network Elements or through AT&T's own facilities, AT&T shall ensure the accuracy of its 911 data by verifying it against the MSAG.
- 50.1.9.10 AT&T shall assign an E911 database coordinator charged with the responsibility of forwarding AT&T end user ALI record information to U S WEST or via a third-party entity, charged with the responsibility of ALI record transfer. AT&T assumes all responsibility for the accuracy of the data that AT&T provides to U S WEST.
- 50.1.9.11 The Parties shall maintain a single point of contact to coordinate all E911 activities under this Agreement.
- 50.1.9.12 For resold services, AT&T shall provide information on new Customers to US WEST within one (1) Business Day of the order completion. US WEST shall update the database within two (2) Business Days of receiving the data from AT&T. If US WEST detects an error in the AT&T provided data, the data shall be returned to AT&T within two (2) Business Days from when it was provided to US WEST. AT&T shall respond to requests from US WEST to make corrections to database record errors by uploading corrected records within two (2) business days. Manual entry shall be allowed only in the event that the system is not functioning properly. AT&T may request, through the BFR process, similar services from US WEST for their customers who are served on a non-resale basis.
- 50.1.9.13 The Parties will cooperate to implement the adoption of a Carrier Code (NENA standard five-character field) on all ALI records received from AT&T, when those standards, NENA-02-00N, are adopted by the industry standards process. USWEST will furnish AT&T any variations from NENA recommendations required for ALI database input. The Carrier Code will be used to identify the carrier of record in INP configurations.
- 50.1.9.14 AT&T will provide end user data to the USWEST ALI database utilizing NENA-02-001 Recommended Formats For Data Exchange, and Recommended Standard For Street Thoroughfare Abbreviations and Protocols For Data Exchange and Data Quality utilizing NENA

Recommended Formats for Data Exchange document dated June 1993.

- 50.1.9.15 USWEST shall identify which ALI databases cover which states, counties or parts thereof, and identify and communicate a point of contact for each.
- 50.1.9.16 USWEST will provide AT&T with the identification of the USWEST 911 controlling office that serves each geographic area served by AT&T.
- 50.1.9.17 U S WEST shall provide to AT&T, for AT&T Customers, E911/911 call routing to the appropriate Public Safety Answering Point ("PSAP") for resold lines. U S WEST shall provide and validate AT&T Customer information to the PSAP in the same fashion as it does for its own Customers. U S WEST shall use its service order process to update and maintain, on the same schedule that it uses for its end users, the AT&T Customer service information in the ALI/DMS used to support E911/911 services. AT&T may request, through the BFR process, similar services from U S WEST for their customers who are served on a non-resale basis.
- 50.1.9.18 AT&T exchanges to be included in U S WEST's E911 Database will be indicated via written notice and will not require an amendment to this Agreement.

#### 50.1.10 The following are Basic 911 and E911 Network Requirements:

- 50.1.10.1 U S WEST, at AT&T option, shall provide a minimum of two (2) E911 trunks per jurisdictional area, or that quantity which will maintain P.01 transmission grade of service, or the level of service provided by U S WEST to itself, whichever is the higher grade of service. These trunks will be dedicated to routing 911 calls from AT&T switch to a U S WEST E911 tandem.
- 50.1.10.2 U S WEST shall provide AT&T a data link to the ALI/DMS database or permit AT&T to provide its own data link to the ALI/DMS database. U S WEST shall provide error reports from the ALI/DMS database to AT&T immediately after AT&T inputs information into the ALI/DMS database. Alternately, AT&T may utilize U S WEST or a third party entity to enter Customer information into the database on a demand basis, and validate Customer information on a demand basis.
- 50.1.10.3 USWEST shall provide the selective routing of E911 calls received from AT&T switching office. This includes the ability to receive the ANI of the AT&T Customer, selectively route the call to the appropriate PSAP, and forward the Customer's ANI to the PSAP. USWEST shall provide AT&T with the appropriate CLLI codes and specifications regarding the tandem serving area associated addresses and meet points in the network.

- 50.1.10.4 Copies of E911 Tandem Boundary Maps shall be available to AT&T. Each map shows the areas served by that E91 tandem. The map provides AT&T the information necessary to set up its network to route E911 callers to the correct E911 tandem.
- 50.1.10.5 AT&T shall ensure that its switch provides an eight-digit ANI consisting of an information digit and the seven-digit exchange code. AT&T shall also ensure that its switch provides the line number of the calling station. In the event of a change in industry standards, the Parties shall cooperate to incorporate the changed standards in their respective networks.
- 50.1.10.6 Each ALI discrepancy report shall be jointly researched by U S WEST and AT&T. Corrective action shall be taken immediately by the responsible party.
- 50.1.10.7 Technical specifications for E911 network interface are available through USWEST technical publication 77338. Technical specifications for database loading and maintenance are available through the third party database manager -- SCC.
- 50.1.10.8 USWEST shall begin restoration of E911 and/or E911 trunking facilities immediately upon notification of failure or outage. USWEST must provide priority restoration of trunks or networks outages on the same terms/conditions it provides itself and without the imposition of Telecommunications Service Priority (TSP).
- 50.1.10.9 U S WEST shall identify any special operator-assisted calling requirements to support 911.
- 50.1.10.10 Trunking shall be arranged to minimize the likelihood of central office isolation due to cable cuts or other equipment failures. There will be an alternate means of transmitting a 911 call to a PSAP in the event of failures.
- 50.1.10.11 Circuits shall have interoffice, loop and carrier system diversity when such diversity can be achieved using existing facilities. Circuits will be divided as equally as possible across available carrier systems. Diversity will be maintained or upgraded to utilize the highest level of diversity available in the network.
- 50.1.10.12 Equipment and circuits used for 911 shall be monitored at all times. Monitoring of circuits shall be done to the individual circuit level. Monitoring shall be conducted by US WEST for trunks between the tandem and all associated PSAPs.
- 50.1.10.13 Repair service shall begin immediately upon receipt of a report of a malfunction. Repair service includes testing and diagnostic service from a remote location, dispatch of or in-person visit(s) of personnel. Technicians will be dispatched without delay.

- 50.1.10.14 All 911 trunks must adhere to the Americans with Disabilities Act requirements.
- 50.1.10.15 The Parties will cooperate in the routing of 911 traffic in those instances where the ALI/ANI information is not available on a particular 911 call.
- 50.1.10.16 AT&T is responsible for network management of its network components in compliance with the Network Reliability Council Recommendations and meeting the network standard of U S WEST for the 911 call delivery.

# 50.1.11 Basic 911 and E911 Additional Requirements

- 50.1.11.1 All AT&T lines that have been ported via INP shall reach the correct PSAP when 911 is dialed. USWEST shall send both the ported number and the AT&T number (if both are received from AT&T). The PSAP attendant shall see both numbers where the PSAP is using a standard ALI display screen and the PSAP extracts both numbers from the data that is sent.
- 50.1.11.2 U S WEST shall work with the appropriate government agency to provide AT&T the ten-digit POTS number of each PSAP which subtends each U S WEST E911 Tandem to which AT&T is interconnected.
- 50.1.11.3 U S WEST will provide AT&T with the ten-digit telephone numbers of each PSAP agency, for which U S WEST provides the 911 function, to be used by AT&T operators for handling emergency calls in those instances where the AT&T Customer dials "O" instead of "911."
- 50.1.11.4 AT&T will provide U S WEST with the ten-digit telephone numbers of each PSAP agency, for which AT&T provides the 911 function, to be used by U S WEST operators for handling emergency calls in those instances where the U S WEST Customer dials "O" instead of "911."
- 50.1.11.5 U S WEST shall notify AT&T forty-eight (48) hours in advance of any scheduled testing or maintenance affecting AT&T 911 service, and provide notification as soon as possible of any unscheduled outage affecting AT&T 911 service.
- 50.1.11.6 AT&T shall be responsible for reporting all errors, defects and malfunctions to U S WEST. U S WEST shall provide AT&T with the point of contact for reporting errors, defects, and malfunctions in the service and shall also provide escalation contacts.
- 50.1.11.7 AT&T may enter into subcontracts with third parties, including AT&T affiliates, for the performance of any of AT&T duties and obligations stated herein.
- 50.1.11.8 U S WEST shall provide sufficient planning information regarding anticipated moves to SS7 signaling for the next twelve (12) months.

- 50.1.11.9 USWEST shall provide notification of any pending tandem moves, NPA splits, or scheduled maintenance outages, with enough time to react
- 50.1.11.10 U S WEST shall provide "reverse ALI" inquiries by public safety entities, consistent with U S WEST's practices and procedures.
- 50.1.11.11 U S WEST shall manage NPA splits by populating the ALI database with the appropriate new NPA codes, consistent with U S WEST's practices and procedures for resold services.
- 50.1.11.12 U S WEST must provide the ability for AT&T to update 911 database with end user information for lines that have been ported via INP or NP.
- 50.1.11.13 The data in the ALI database shall be managed by U S WEST but is the property of U S WEST and all participating telephone companies.
- 50.1.12 Performance Criteria. E-911 Database accuracy shall be as set forth below:
  - 50.1.12.1 Accuracy of ALI (Automatic Location Identification) data submitted by AT&T to USWEST will be measured jointly by the PSAPs and USWEST. All such reports shall be forwarded to AT&T by USWEST and will indicate incidents when incorrect or no ALI data is displayed. A report regarding any inaccuracy shall be prepared by USWEST.
  - 50.1.12.2 Each discrepancy report will be jointly researched by USWEST and AT&T. Corrective action will be taken immediately by the responsible party.
  - 50.1.12.3 Each party will be responsible for the accuracy of the Customer records it provides.

#### 50.2 Directory Assistance Service

- 50.2.1 U S WEST shall provide for the routing of directory assistance calls (including, but not limited to, 411, 555-1212, NPA-555-1212) dialed by AT&T Customers directly to either the AT&T Directory Assistance service platform or U S WEST Directory Assistance service platform as specified by AT&T.
- 50.2.2 AT&T Customers shall be provided the capability by U S WEST to dial the same telephone numbers for access to AT&T Directory Assistance that U S WEST Customers use to access U S WEST Directory Assistance.
- 50.2.3 U S WEST shall provide Directory Assistance functions and services to AT&T for its Customers as described below until, at AT&T's discretion, U S WEST routes calls to the AT&T Directory Assistance Services platform.
  - 50.2.3.1U S WEST agrees to provide AT&T Customers with the same Directory Assistance service available to U S WEST Customers.

- 50.2.3.2U S WEST shall notify AT&T in advance of any changes or enhancements to its Directory Assistance service, and shall make available such service enhancements on a non-discriminatory basis to AT&T.
- 50.2.3.3U S WEST shall provide Directory Assistance to AT&T Customers in accordance with US WEST's internal operating procedures and standards, which shall, at a minimum, comply with accepted professional and industry standards.
- 50.2.3.4U S WEST shall provide AT&T with the same level of support for the provisioning of Directory Assistance as U S WEST provides itself.
- 50.2.3.5 Service levels shall comply, at a minimum, with Commission requirements for Directory Assistance.
- 50.2.3.6U S WEST agrees to maintain an adequate operator work force based on a review and analysis of actual call attempts and abandonment rate.
- 50.2.3.7 Subject to the applicable provisions of the applicable collective US WEST bargaining agreements, AT&T shall be permitted to participate in all call monitoring activities available to US WEST and to remote call monitor as customarily practiced by the outsource customers of call centers.<sup>35</sup>
- 50.2.3.8U S WEST shall provide the following minimum Directory Assistance capabilities to AT&T Customers;
  - (a) A maximum of two (2) Customer listings and/or addresses or U S WEST parity per AT&T Customer request.
  - (b) Name and address to AT&T Customers upon request, except for unlisted numbers, in the same states where such information is provided to U S WEST Customers.
  - (c) For AT&T customers who are served exclusively through resold US WEST retail services, AT&T may resell US WEST's Directory Assistance call completion services to the extent US WEST offers call Directory Assistance completion to its own end users. For AT&T customers who are served from an AT&T switch, AT&T may request Directory Assistance call completion services through the BFR process Such BFR process shall address the identification of the AT&T end user at the US WEST Directory Assistance platform for purposes of routing and billing of intraLATA and interLATA toll calls.
  - (d) The USWEST mechanized interface with the USWEST subscriber listing database is not available for AT&T as of the

<sup>&</sup>lt;sup>35</sup> Arizona Bench Order, May 29, 1997 Hearing, pp. 1613-1614.

Effective Date of this Agreement. When the mechanized interface is available, USWEST will populate the Directory Assistance Database in the same manner and in the same time frame as for USWEST Customers.

- (e) Any information provided by a Directory Assistance Automatic Response Unit (ARU) shall be repeated the same number of times for AT&T Customers as for U S WEST Customers.
- (f) When an AT&T Customer served on a resale or unbundled switching basis requests a USWEST directory assistance operator to provide instant credit on a directory assistance call, the USWEST directory assistance operator shall inform the AT&T Customer to call an 800 number for AT&T Customer service to request a credit. The accurate identification of AT&T as the customer's local service provider by the USWEST directory assistance operator requires the use of separate AT&T trunks to the Directory Assistance Platform.
- 50.2.3.9For resold lines and unbundled switching, U S WEST shall provide data regarding billable events as requested by AT&T.
- 50.2.3.10 U S WEST agrees to (a) provide to AT&T operators, on line access to U S WEST's directory assistance database equivalent to the access provided to U S WEST operators; (b) allow AT&T or an AT&T designated operator bureau to license U S WEST's subscriber listings database on terms and conditions equivalent to the terms and conditions upon which U S WEST utilizes such databases; and (c) in conjunction with branded or unbranded directory assistance services pursuant to Section 8 of this Part A, provide caller-optional directory assistance call completion service which is comparable in every way to the directory assistance call completion service U S WEST makes available to its own users. AT&T may, at its option, request U S WEST not to provide call completion services to AT&T.
- 50.2.3.11 In addition to charges for directory assistance, when call completion for an intraLATA toll call is requested, the applicable charge for the completion of such intraLATA toll call will apply.

#### 50.3 Operator Services

- 50.3.1 U S WEST shall provide, for the routing of local Operator Services calls (including, but not limited to, 0+, 0-) dialed by AT&T Customers directly to either the AT&T operator service platform or U S WEST operator service platform as specified by AT&T.
- 50.3.2 AT&T Customers shall be provided the capability by U S WEST to dial the same telephone numbers to access AT&T operator service that U S WEST Customers dial to access U S WEST operator service.

- 50.3.3 U S WEST shall provide Operator Services to AT&T as described below until, at AT&T's discretion, U S WEST routes calls to the AT&T local Operator Services platform.
  - 50.3.3.1U S WEST agrees to provide AT&T Customers the same Operator Services available to U S WEST Customers. U S WEST shall make available its service enhancements on a non-discriminatory basis.
  - 50.3.3.2U S WEST shall provide the following minimum Operator Service capabilities to AT&T Customers:
    - (a) U S WEST shall complete 0+ and 0- dialed local calls, including O-Coin, Automatic Coin Telephone Service (ACTS) and the completion of coin calls, the collection of coins, and the provision of coin rates.
    - (b) U S WEST shall complete 0+ intraLATA and, when offered, interLATA toll calls. The Parties will cooperate to develop industry standards to include the end user's PIC in operator services signaling and the development of associated routing procedures.
    - (c) US WEST shall complete calls for AT&T's Customers that are billed to calling cards and other commercial cards on the same basis as provided to US WEST own customers and AT&T shall designate to US WEST the acceptable types of special billing.
    - (d) US WEST shall complete person-to-person calls.
    - (e) USWEST shall complete collect calls.
    - (f) US WEST shall provide the capability for callers to bill to a third party and complete such calls.
    - (g) US WEST shall complete station-to-station calls.
    - (h) US WEST shall process emergency calls.
    - (i) USWEST shall process Busy Line Verify and Busy Line Interrupt requests.
    - U S WEST shall process emergency call trace in accordance with its normal and customary procedures.
    - U S WEST shall process operator-assisted directory assistance calls.
    - (I) U S WEST operators shall provide AT&T Customers with long distance rate quotes to the extent U S WEST provides such rate quotes to its own end users. Based on technology available as of the Effective Date of this Agreement, the provision of rate

quotes to AT&T Customers requires a separate AT&T trunk group to the US WEST operator services platform to identify the caller as an AT&T Customer.

- (m) US WEST operators shall provide AT&T Customers with time and charges to the extent US WEST provides such time and charges to its own end users. Based on technology available as of the Effective Date of this Agreement, the provision of time and charges to AT&T Customers requires a separate AT&T trunk group to the US WEST operator services platform to identify the caller as an AT&T Customer.
- (n) U S WEST shall route 0- traffic to a "live" operator team.
- (o)<sup>36</sup> At the election of AT&T, when an AT&T Customer requests a US WEST operator to provide instant credit on an Operator Services call, the US WEST operator shall either inform the AT&T Customer that a credit will be granted, or shall inform the AT&T Customer to call a toll free number for AT&T Customer service to request a credit. US WEST shall provide one (1) toll free number for business Customers and another for residential Customers.
  - For resold Operator Services, U S WEST shall credit the AT&T account in accordance with the same credit procedures which are applied to U S WEST's own retail customers;
  - (ii) For Operator Services offered as an unbundled Network Element, US WEST shall credit the AT&T account for 50 percent of the charges, except where a greater credit is required by the Commission's service quality rules and regulations.
- (p) U S WEST shall provide caller assistance for the disabled in the same manner as provided to U S WEST Customers.
- (q) When available to USWEST end users, USWEST shall provide operator-assisted conference calling to AT&T.
- 50.3.3 U S WEST shall exercise at least the same level of fraud control in providing Operator Service to AT&T that U S WEST provides for its own operator service, where the AT&T fraud control data is in U S WEST's LIDB database.
- 50.3.4 U S WEST shall perform billed number screening when handling collect, third party, and calling card calls, both for station to station and person to person call types.

Procedural Order, July 14, 1997, page 11-12.

- 50.3.5 Subject to the applicable provisions of the applicable collective U S WEST bargaining agreements, AT&T shall be permitted to participate in all call monitoring activities available to U S WEST and to remote call monitor as customarily practiced by the outsource customers of call centers.<sup>37</sup>
- 50.3.6 U S WEST shall direct Customer account and other similar inquiries to the Customer service center designated by AT&T.
- 50.3.7 USWEST shall provide an electronic feed of Customer call records in "EMR" format to AT&T in accordance with the time schedule mutually agreed between the Parties.
- 50.3.8 U S WEST shall update the Line Information Data Base ("LIDB") for AT&T Customers. Additionally, U S WEST must provide access to LIDB for validation of collect, third party billed, and LEC card billed calls.
- 50.3.9 Where INP is deployed and when a BLV/BLI request for a ported number is directed to a U S WEST operator and the query is not successful (i.e., the request yields an abnormal result), AT&T may request, through the BFR process, that the operator confirm whether the number has been ported and direct the request to the appropriate operator.
- 50.3.10 U S WEST shall allow AT&T to order provisioning of Telephone Line Number ("TLN") calling cards and BNS,, in its LIDB, for ported numbers, as specified by AT&T. U S WEST shall continue to allow AT&T access to its LIDB.
- 50.3.11 Toll and Assistance ("T/A") refers to functions Customers associate with the "O" operator. Subject to availability and capacity, access may be provided via operator services trunks purchased from U S WEST or provided by AT&T via collocation arrangements to route calls to AT&T's platform.
- 50.3.12 Automated Branding ability to announce the carrier's name to the Customer during the introduction of the call.
- 50.3.13 Interconnection to the U S WEST Toll and Assistance Operator Services from an end office to U S WEST T/A is technically feasible at least at three (3) distinct points on the trunk side of the switch. The first connection point is an operator services trunk connected directly to the T/A host switch. The second connection point is an operator services trunk connected directly to a remote T/A switch. The third connection point is an operator services trunk connected to a remote access tandem with operator concentration capabilities.
- 50.3.14 All trunk interconnections will be digital.
- 50.3.15 The technical requirements of operator services type trunks and the circuits to connect the operator positions to the host are covered in the Operator Services Switching Generic Requirements ("OSSGR") Bellcore Document number FR-NWT-000271.

Arizona Bench Order, May 29, 1997 Hearing, p. 1617.

#### 50.3.16 Busy Line Verify and Interrupt

- 50.3.16.1 At the request of AT&T operators or Customers, U S WEST operators will perform Busy Line Verify ("BLV") and/or Busy Line Interrupt ("BLI") operations where such capacity exists.
- 50.3.16.2 When possible and where consistent with the service U S WEST provides to its own Customers and/or end users, U S WEST shall engineer its BLV/BLI facilities to accommodate the anticipated volume of BLV/BLI requests during the busy hour. AT&T may, from time to time, provide its anticipated volume of BLV/BLI requests to U S WEST. In those instances when failures occur to significant portions of the BLV/BLI systems and databases and those systems and databases become unavailable, U S WEST shall promptly Inform AT&T.
- 50.3.16.3 BLV is performed when one Party's Customer requests assistance from the other Party's operator or operator bureau to determine if the called line is in use; provided, however, that the operator bureau will not complete the call for the Customer initiating the BLV inquiry. Only one (1) BLV attempt will be made per Customer operator bureau call, and a charge shall apply whether or not the called party releases the line.
- 50.3.16.4 BLI is performed when one Party's Customer requests assistance from the other Party's operator bureau to interrupt a telephone call in progress after BLV has occurred. The operator bureau will interrupt the busy line and inform the called party that there is a call waiting. The operator bureau will only interrupt the call and will not complete the telephone call of the Customer initiating the BLI request. The operator bureau will make only one (1) BLI attempt per Customer operator telephone call and the applicable charge applies whether or not the called party releases the line.
- 50.3.16.5 Each Party's operator bureau shall accept BLV and BLI inquiries from the operator bureau of the other Party in order to allow transparent provision of BLV/ BLI traffic between the Parties' networks.
- 50.3.16.6 Each Party shall route BLV/BLI Traffic inquiries over direct trunks between the Parties' respective operator bureaus. Unless otherwise mutually agreed, the Parties shall configure BLV/BLI trunks over the Interconnection architecture defined in Attachment 4 to this Agreement.
- 50.4 Directory Assistance and Listings Service Requests
  - 50.4.1 These requirements pertain to USWEST's Directory Assistance and Listings Service Request process that enables AT&T to (a) submit AT&T Customer information for inclusion in USWEST Directory Assistance and Directory Listings databases; (b) submit AT&T Customer information for inclusion in published directories; and (c) provide AT&T Customer delivery address information to enable USWEST to fulfill directory distribution obligations.

- 50.4.1.1 [Intentionally left blank for numbering consistency]
- 50.4.1.2 U S WEST will accept the following Directory Listing Migration Orders from AT&T, valid under all access methods, including, but not limited to, Resale, Unbundled Network Elements and Facilities-Based, and will process the orders in a mechanized format:
  - (a) Migrate with no Changes: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Transfer ownership and billing for listings to AT&T.
  - (b) Migrate with Additions: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Incorporate the specified additional listings order. Transfer ownership and billing for the listings to AT&T.
  - (c) Migrate with Deletions: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Delete the specified listings from the listing order. Transfer ownership and billing for the listings to AT&T.
- 50.4.1.3The Directory Listings Migration Options should not be tied to migration options specified for a related service order (if any) such that a service order specified as migration with changes may be submitted along with a directory listing order specified as migration with no changes.
- 50.4.1.4U S WEST shall enable AT&T to electronically transmit multi-line listing orders.
- 50.4.1.5U S WEST agrees to work cooperatively with AT&T to define specifications for, and implement a daily summary report of, Directory Service Requests. The summary information will include, but is not limited to, the following information:
  - (a) White page listings text and format (name, address, phone, title, designation, extra line requirements)
  - (b) Listing Instruction codes
- 50.4.1.6To ensure accurate order processing, U S WEST shall provide to AT&T the following information, with updates within one (1) Business Day of change and via electronic exchange:

- (a) A matrix of NXX to central office
- (b) Geographical maps, if available, of US WEST service area
- (c) A description of calling areas covered by each directory, including, but not limited to, maps of calling areas and matrices depicting calling privileges within and between calling areas
- (d) Listing format rules
- (e) Listing alphabetizing rules
- (f) Standard abbreviations acceptable for use in listings and addresses
- (g) Titles and designations
- 50.4.1.7 Based on changes submitted by AT&T, USWEST shall update and maintain Directory Assistance and Directory Listings data for AT&T .Customers who:
  - (a) Disconnect Service
  - (b) Change carrier
  - (c) Install Service
  - (d) Change any service which affects Directory Assistance information
  - (e) Specify Non-Solicitation
  - (f) Are Non-Published, Non-Listed, or Listed
- 50.4.1.8U S WEST shall not charge for storage of AT&T Customer information in the Directory Assistance and Directory Listing systems.
- 50.4.1.9 AT&T shall not charge for storage of U S WEST Customer information in the Directory Assistance and Directory Listing systems.

#### 50.5 Directory Assistance Data

- 50.5.1 This Section refers to the residential, business, and government Customer records used by U S WEST to create and maintain databases for the provision of live or automated operator assisted Directory Assistance. Directory Assistance data is information that enables telephone exchange carriers to swiftly and accurately respond to requests for directory information, including, but not limited to, name, address and phone numbers. Under the provisions of the Act and the FCC's Interconnection Order, U S WEST shall provide unbundled and non-discriminatory access to the residential, business and government Customer records used by U S WEST to create and maintain databases for the provision of live or automated operator assisted Directory Assistance. AT&T may combine this element with any other Network Element for the provision of any Telecommunications Service. <sup>38</sup>
- 50.5.2 U S WEST shall provide an initial load of Customer records and Customer list information to AT&T, in a mutually-agreed-to format, via electronic transfer, within thirty (30) calendar days of the Effective Date of this Agreement. The initial load shall include all data resident in the U S WEST Databases and/or systems used by

<sup>38</sup> MCIm Order, p.11, Issue 14; AT&T Order, p. 13, Issue 25.

- U S WEST for housing Directory Assistance data and/or Customer listing data. In addition, the initial load shall be current as of the prior Business Day on which the initial load is provided.
- 50.5.3 U S WEST shall provide AT&T daily updates to the Customer records and Customer list information in a mutually-agreed-to format via electronic transfer.
- 50.5.4 U S WEST shall provide the ability for AT&T to electronically query the U S WEST Directory Assistance Database and listings Database in a manner at least consistent with and equal to that which U S WEST provides to itself or any other Person.
- 50.5.5 U S WEST shall provide AT&T a complete list of ILECs, CLECs, and independent telephone companies that provided data contained in the database.
- 50.5.6 On a daily basis, U S WEST shall provide updates (end user and mass) to the listing information via electronic data transfer. Updates shall be current as of one (1) Business Day prior to the date provided to AT&T.
- 50.5.7 U S WEST shall provide AT&T access to Directory Assistance support databases. For example, AT&T requires access to use restriction information including, but not limited to, call completion.
- 50.5.8 Directory Assistance data shall specify whether the Customer is a residential, business, or government Customer.
- 50.5.9 Directory Assistance data shall be provided on the same terms, conditions, and rates that U S WEST provides such data to itself or other third parties.
- 50.5.10 U S WEST shall provide complete refresh of the Directory Assistance data upon request by AT&T.
- 50.5.11 U S WEST and AT&T will cooperate in the designation of a location at which the data will be provided.

# 51. Unused Transmission Media<sup>39</sup>

#### 51.1 Definitions

- 51.1.1 Unused Transmission Media is physical inter-office transmission media (e.g., optical fiber, copper twisted pairs, coaxial cable) which have no lightwave or electronic transmission equipment terminated to such media to operationalize transmission capabilities.
- 51.1.2 Dark fiber is excess fiber optic cable which has been placed in a network and is not currently being lit by electronics from any carrier. Dark Fiber, one type of Unused Transmission Media, is unused strands of optical fiber. Dark Fiber also includes strands of optical fiber which may or may not have lightwave repeater

All bolded language in this Section is included per MCIm Order, pp. 8-9 at Issue 9c and AT&T Order Issue 22.

(regenerator or optical amplifier) equipment interspliced, but which has no line terminating facilities terminated to such strands. Unused Transmission Media also includes unused wavelengths within a fiber strand for purposes of coarse or dense wavelength division multiplexed (WDM) applications. Typical single wavelength transmission involves propagation of optical signals at single wavelengths (1.3 or 1.55 micron wavelengths). In WDM applications, a WDM device is used to combine optical signals at different wavelengths on to a single fiber strand. The combined signal is then transported over the fiber strand. For coarse WDM applications, one (1) signal each at 1.3 micron and 1.55 micron wavelength are combined. For dense WDM applications, many signals in the vicinity of 1.3 micron wavelength and/or 1.55 micron wavelength are combined.

51.2 While U S WEST is not required to provide Unused Transmission Media, other than Dark Fiber, 40 AT&T may, subject to the agreement of U S WEST, lease copper twisted pairs, coaxial cable or other Unused Transmission Media.

#### 51.3 Requirements

- 51.3.1 Subject to Section 51.2 above, USWEST shall make available Unused Transmission Media to AT&T under a lease agreement or other arrangement.
- 51.3.2 U S WEST shall provide a single point of contact for negotiating all Unused Transmission Media use arrangements.
- 51.3.3 AT&T may test the quality of the Unused Transmission Media to confirm its usability and performance specifications.
- 51.3.4 Where Unused Transmission Media is required to be offered or is agreed to be offered by U S WEST, U S WEST shall provide to AT&T information regarding the location, availability and performance of Unused Transmission Media within ten (10) Business Days for a records based answer and twenty (20) Business Days for a field based answer, after receiving a request from AT&T ("Request"). Within such time period, U S WEST shall send written or electronic confirmation or any other method of notification agreed to by the Parties of availability of the Unused Transmission Media ("Confirmation").
- 51.3.5 Where Unused Transmission Media is required to be offered or is agreed to be offered by USWEST, USWEST shall make Unused Transmission Media available for AT&T's use in accordance with the terms of this Section 51 within twenty (20) Business Days or a reasonable time frame consistent with industry standards after it receives written acceptance from AT&T that the Unused Transmission Media is wanted for use by AT&T. Splicing of AT&T fiber may be performed at the same points that are available for USWEST splices.

# 51.4 Requirements Specific to Dark Fiber

51.4.1 AT&T may test Dark Fiber leased from U S WEST using AT&T or AT&T designated personnel subject to Section 51.2. U S WEST shall provide appropriate interfaces to

MCIm Order, pp. 8-9 at Issue 9c and AT&T Order Issue 22.

allow testing of Dark Fiber. US WEST shall provide an excess cable length of twenty-five (25) feet minimum, where available, for fiber in underground conduit. US WEST shall provide splicing of AT&T fiber to US WEST Dark Fiber under normal circumstances (e.g., no construction) in metropolitan areas within seventeen (17) calendar days of AT&T's request, and within thirty (30) calendar days of a request in a non-metropolitan area. AT&T may request expedited splicing, which shall be subject to available US WEST resources.

- 51.4.2 For WDM applications, U S WEST shall provide to AT&T an interface to an existing WDM device or allow AT&T to install its own WDM device (where sufficient system loss margins exist or where AT&T provides the necessary loss compensation) to multiplex the traffic at different wavelengths. This applies to both the transmit and receive ends of the Dark Fiber.
- 51.5 US WEST may not reserve future capacity of its Dark Fiber for its own use, with the exception of maintenance or emergency spare. Maintentance and emergency spare also will be for the benefit of any CLEC which has leased dark fiber from US WEST. Fiber which US WEST has included as part of its local service rate base, and upon which it receives a rate of return, but which is used for other than local service will be subject to reclaim by CLECs in support of their provisioning of local service.<sup>41</sup>
- 51.6 Portions of the bandwidth of the fiber may be sectioned and AT&T may share the bandwidth with U S WEST and other CLECs.
- 51.7 The fiber should be used efficiently and to a reasonable level of capacity. AT&T's Request to lease Dark Fiber must establish that another Network Element of comparable expense cannot satisfy AT&T's needs. At its discretion, AT&T may share fiber capacity with other parties, and such shared-use may justify AT&T's need for the fiber.
- 51.8 US WEST may revoke the lease or other use arrangement and reclaim its fiber or bandwidth with twelve (12) months notice to AT&T, if US WEST can establish that the fiber is necessary to meet its bandwidth requirements or those of another requesting CLEC, provided that the original CLEC's transportation is provided for by alternative means and at comparable prices and quality. The conversion to the alternative means shall be at the expense of the new user of the Dark Fiber, whether that be US WEST or another CLEC. One of the alternatives means to be considered by US WEST will be the sharing of bandwidth.
- 51.9 If AT&T obtains access to U S WEST's Dark Fiber, AT&T shall make its Dark Fiber available to U S WEST on a comparable and reciprocal basis. This Section 51.9 shall not take effect until CLECs (other than wireless CLECs) operating within U S WEST's Arizona service territory provide service to at least 200,000 access lines.

Procedural Order, July 14, 1997 at pages 12-13.

#### 52. Service Standards<sup>42</sup>

U S WEST will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with service standards, measurements, and performance requirements that are expressly specified in this Agreement and Attachment 5 hereto. In cases where such performance standards are not expressly specified, U S WEST will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with performance standards which are at least equal to the level of performance standards and/or quality of service that U S WEST provides to itself, its Affiliates, to other CLECs, or other quality of service requirements imposed by the Commission, whichever is higher, in providing Local Resale, Ancillary Functions, Network Elements or Combinations to itself, to its end-users or to its Affiliates. If AT&T requests a higher level of service than that provided by U S WEST to itself, AT&T shall make the request pursuant to the BFR process.

#### 52.1 Definitions

Pending adoption of service standards rules by the Commission, the following interim provisions shall apply.

- 52.1.1 "Specified Performance Commitment" means the commitment by U S WEST to meet the Performance Criteria for any Specified Activity during the Specified Review Period. The Specified Review Period shall be the same period as U S WEST provides itself for existing Performance Criteria and shall be ninety (90) days for new Performance Criteria. The standard of performance for each of the measurements of performance in Arizona shall be the quality of service which U S WEST provides in Arizona to either itself, its ten largest end user Customers in the aggregate, independent LECs in the aggregate, other CLECs in the aggregate, or other quality of service requirements imposed by the Commission, whichever is highest. Neither performance penalties nor credits will be imposed for failure to comply with service standards.
- 52.1.2 "Specified Activity" includes, but is not limited to, the following activities:
  - (a) Installation Activities -- apply to resold services, unbundled loops, unbundled switching, and interim number portability:
    - (i) Installation Intervals Offered (measured from application date to original due date);
    - (ii) Installation Commitments Met;
    - (iii) Installation Reports within seven (7) days (percent of reports per total of new, to or change orders).
  - (b) Repair Activities apply to resold service, unbundled loops, unbundled switching, and interim number portability:

Section added per MCIm Order, p. 17 at Issue 28 and AT&T Order, p. 20 at Issues 36, 73, and 74.

- (i) Out of Service Cleared in Less than Twenty-four (24) Hours (percent of total out of service reports);
- (ii) Report Rate per 100 Access Lines;
- (iii) Repair Commitments Met;
- (iv) Out of Service and Service Affecting Cleared in Less than Fortyeight (48) Hours;
- (v) Repair Repeat Reports within Thirty (30) Days (Percent of Repeats per 100 Access Lines).
- (c) Trunking Activities includes interconnection trunks:
  - (i) Defects per One Million Calls (Dedicated Facilities/Trunkside only).
- 52.1.3 "Performance Criteria" means, with respect to a Specified Review Period (i.e., a calendar month or quarter), the performance by U S WEST for the specified activities for AT&T will meet or exceed the average performance by U S WEST for each resold or unbundled Network element the total universe of for each Specified Activity.

#### 52.2 Failure to Meet the Performance Criteria

If, during a Specified Review Period, U S WEST fails to meet the Performance Criteria, U S WEST will use its best efforts to meet the Performance Criteria for the next Specified Review Period. If U S WEST fails to meet the Performance Criteria for two (2) consecutive periods, the Parties agree, in good faith, to attempt to resolve such issues through negotiation or non-binding arbitration. This paragraph shall not be construed to waive either Party's right to seek legal or regulatory intervention as provided by state or federal law. AT&T may seek regulatory or other legal relief including requests for specific performance of U S WEST's obligations under this Agreement.

#### 52.3 Limitations

U S WEST's failure to meet or exceed any of the Performance Criteria cannot be as a result, directly or indirectly, of a Delaying Event. A "Delaying Event" means (a) a failure by AT&T to perform any of its obligations set forth in this Agreement, (b) any delay, act or failure to act by a Customer, agent of subcontractor of AT&T, or (c) any force majeure event. If a Delaying Event prevents U S WEST from performing a Specified Activity, then such Specified Activity shall be excluded from the calculation of U S WEST's compliance with the Performance Criteria.

#### 52.4 Records

USWEST shall maintain complete and accurate records, for the Specified Review Period, of its performance under this Agreement for each Specified Activity and its compliance with the Performance Criteria. USWEST shall provide to AT&T such records in a self-reporting format. The Parties agree that such records shall be deemed Proprietary Information.

# 52.5 Cost Recovery

US WEST reserves the right to attempt to recover the costs, if any, associated with the creation of the above reports and standards through a future proceeding before a regulatory body.

52.6 AT&T and U S WEST acknowledge and understand that the performance and quality of service standards outlined in this Section may be supplanted or supplemented by the generic proceeding to be held by the Commission to determine permanent quality of service measurements/liquidated damages.<sup>43</sup>

# 53. Entire Agreement

- 53.1 This Agreement shall include the Attachments, Appendices and other documents referenced herein all of which are hereby incorporated by reference, and constitutes the entire agreement between the Parties and supersedes all prior oral or written agreements, representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.
- 53.2 If a provision contained in any USWEST tariff conflicts with any provision of this Agreement, the provision of this Agreement shall control, unless otherwise ordered by the FCC or the Commission.

# 54. Reservation of Rights

- 54.1 The Parties acknowledge that the terms of this Agreement were established pursuant to an order of the Commission. Any or all of the terms of this Agreement may be altered or abrogated by a successful challenge to this Agreement (or the order approving this Agreement) as permitted by applicable law. By signing this Agreement, neither Party waives its right to pursue such a challenge.
- The Parties enter into this Agreement without prejudice to any position they may have taken previously, or may take in the future in any legislative, regulatory, or other public forum addressing any matters, including matters related to the types of arrangements prescribed by this Agreement.

MCIm Order, p. 17 at Issue 28 and AT&T Order, p. 20 at Issues 36, 73, & 74.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

AT&T Communications of the Mountain States, Inc. US WEST Communications, Inc.

Katherin L flemen
*Signature
Katherine L Fleming Name Printed Typed
Exec Director-Intersonnect
Title
7/18/97
Date

\*Signed as ordered by the arbitrator/commission in Docket Nos. U-2428-95-417, E-1051-96-417, U-3175-96-479, and E-1051-96-479. Signature does not indicate agreement with all aspects of the arbitrator's decision, nor does it waive any of U S WEST's right to seek judicial review of all or part of the agreement, or to reform the agreement as the result of successful judicial review.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

AT&T Communications of the Mountain States, Inc.	U S WEST Communications, Inc.
Mary Beth Vitale.	*Signature
Mary Beth Vitale Name Printed/Typed	Name Printed/Typed
AT&T President - Western States Title	Tide
7-18-97	
Date	Date

\*Signed as ordered by the arbitrator/commission in Docket Nos. U-2428-96-417, E-1051-96-417, U-3175-96-479, and E-1051-96-479. Signature does not indicate agreement with all aspects of the arbitrator's decision, nor does it waive any of U S WEST's right to seek judicial review of all or part of the agreement, or to reform the agreement as the result of successful judicial review.

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#### **RATES and CHARGES**

#### 1. General Principles

- 1.1 All rates provided under this Agreement shall remain in effect for the term of this Agreement unless they are not in accordance with all applicable provisions of the Act, the rules and regulations of the FCC, or the Commission's rules and regulations.
- 1.2 Except as otherwise specified in this Agreement, as approved or ordered by the Commission, or as agreed to by the Parties through good faith negotiations, nothing in this Agreement shall prevent a Party through the dispute resolution process described in this Agreement from seeking to recover the costs and expenses, if any, it may incur in (a) complying with and implementing its obligations under this Agreement, the Act, and the rules, regulations and orders of the FCC and the Commission, and (b) the development, modification, technical installation and maintenance of any systems or other infrastructure which it requires to comply with and to continue complying with its responsibilities and obligations under this Agreement.

#### 2. Resale Rates and Charges

- 2.1 On an interim basis and subject to true up following permanent pricing proceedings, U S WEST is permitted to charge a Customer Transfer Charge ("CTC") for resale customers switching to AT&T. AT&T shall be permitted to demonstrate what its own cost will be upon termination of a resale customer, so that amount may be discounted from the CTC payable to U S WEST.
- 2.2<sup>2</sup> A resale discount rate of seventeen percent (17%) is adopted as an interim wholesale discount for those services subject to resale under this Agreement. Such interim wholesale discount is subject to true up upon establishment of permanent rates.
- 2.3 If the resold services are purchased pursuant to tariffs and the tariff rates change, charges billed to AT&T for such services will be based upon the new tariff rates less the applicable wholesale discount as agreed to herein. The new rate will be effective upon the tariff effective date.
- 2.4 A Subscriber Line Charge (SLC) will continue to be paid by AT&T without discount for each local exchange line resold under this Agreement. All federal and state rules and regulations associated with SLC or as found in the applicable tariffs also apply.
- 2.5 AT&T will pay to U S WEST the PIC change charge without discount associated with AT&T end user changes of interexchange or intraLATA carriers.
- 2.6 AT&T agrees to pay U S WEST at the wholesale discount rate when its end user activates any services or features that are billed on a per use or per activation basis (e.g., continuous redial, last call return, call back calling, call trace, etc.). U S WEST shall provide AT&T with

MCIm Order, p. 24 at Issue 41.

MCIm Order, p. 27 and AT&T Order at Issue 32.

detailed billing information per applicable OBF standards unless otherwise agreed to by the Parties as necessary to permit AT&T to bill its end users such charges.

- 2.7 [Intentionally left blank for numbering consistency]
- 2.8 Nonrecurring charges will be billed as approved by the Commission.
- 2.9 [Intentionally left blank for numbering consistency]
- 2.10 Service quality credits will not be applicable as additional resale discounts.3
- 2.11 Resale prices shall be wholesale rates determined on the basis of retail rates charged to subscribers for the Telecommunications Service requested, excluding the portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by U S WEST, as specified in the Act, by the FCC and/or the Commission. U S WEST shall be obligated to offer its volume and term discount service plans to AT&T provided that AT&T complies with the volume and term requirements contained therein. If selected by AT&T, an appropriate wholesale discount shall also be applied to such plans. With the exception of the preceding, AT&T shall not be required to agree to volume or term commitments as a condition for obtaining Local Service.
- 2.12 U S WEST shall bill AT&T and AT&T is responsible for all applicable charges for Resale Services. AT&T shall be responsible for all charges associated with services that AT&T resells to an end user.

# 3. Construction and Implementation Costs

- 3.1 US WEST may assess AT&T up-front, nonrecurring charges for construction costs associated with a service only if US WEST assesses its own end users such charges for similar construction and also demonstrates to the Commission that it is customary industry practice to charge end users for similar costs. If a tariff exists, such charges are deemed to be a customary industry practice. US WEST shall not double recover nonrecurring construction charges. If another CLEC or US WEST receives a benefit from the construction or other activity for which AT&T is charged, AT&T is entitled to recover contribution from the CLEC, or, if applicable, US WEST as a beneficiary, for a share of the costs.<sup>5</sup>
- 3.2 [Intentionally left blank for numbering consistency]
- 3.3 [Intentionally left blank for numbering consistency]
- 3.4 A quote for the AT&T portion of a specific job will be provided to AT&T. The quote will be in writing and will be binding for ninety (90) days after the issue date. When accepted, AT&T

MCIm Order, pp. 17-18 at Issue 28 and AT&T Order at Issue 36.

AT&T Order, p. 19 at Issue 33.

MCIm Order, pp. 23-24 at Issue 41 and AT&T Order at Issue 39.

will be billed the quoted price and construction will commence after receipt of payment. If AT&T chooses not to have U S WEST construct the facilities, U S WEST reserves the right to bill AT&T for the expense incurred for producing the engineered job design.

- 3.5 AT&T shall make payment of fifty percent (50%) of the nonrecurring charges and fees upon acceptance of the quotation with the remainder due upon completion of the construction. In the event that AT&T disputes the amount of U S WEST's proposed construction costs, AT&T shall deposit fifty percent (50%) of the quoted construction costs into an interest bearing escrow account prior to the commencement of construction. The remainder of the quoted construction costs shall be deposited into the escrow account upon completion of the construction. Upon resolution of the dispute, the escrow agent shall distribute amounts in the account in accordance with the resolution of such dispute, and any interest that has accrued with respect to amounts in the account shall be distributed proportionately to the Parties. The pendency of any such dispute shall not affect the obligation of U S WEST to complete the requested construction.
- 3.6 Notwithstanding any provision contained in this Agreement to the contrary, within ninety (90) days of the Effective Date of this Agreement, the Parties shall negotiate a pricing schedule for collocation enclosure buildouts.<sup>6</sup>

# 4. Unbundled Loops - Conditioning Charge

4.1 For loops that need conditioning, as requested by AT&T, to ensure the necessary transmission standard, conditioning charges may apply so long as such charges are assessed to U S WEST's similarly situated customers. If U S WEST normally charges its customers an up-front fee, it may require AT&T to pay an up-front fee. If the fee for conditioning is built into the monthly cost for its customers, however, the conditioning costs shall be considered as part of the forward looking economic cost of the upgraded loop.<sup>7</sup>

#### 5. Transport and Termination - Interim Prices

5.18 Pursuant to A.A.C. R14-2-1304, the Parties will utilize bill and keep as a reciprocal compensation mechanism for a period of twenty-four (24) months from the time of the Commission's approval of the first interconnection agreement between U S WEST and any CLEC (December 18, 1996). Unless permanent rates have been established, upon termination of bill and keep, interim rates shall apply. Either Party may seek an earlier termination of the bill and keep mechanism if it is able to prove to the Commission, based on six (6) consecutive months of its traffic data, that traffic terminated by AT&T and U S WEST is out of balance by more than ten (10) percent. Reciprocal compensation shall comply with the Recommended Order on

Procedural Order, July 14, 1997, page 24.

MCIm Order, pp. 27-28 and AT&T Order, p. 37.

MCIm Order, p. 28 and AT&T Order at Issue 88.

Consolidated Cost and Pricing Arbitration, to be trued up upon approval of that Decision by the Commission.9

- 5.1.1 At such time as bill and keep is terminated, and permanent rates are established by the Commission, a true-up for the regulatory lag may be ordered by the Commission.
- 5.2<sup>10</sup> AT&T shall receive fair compensation for the use of its switch equivalent to that of US WEST's switch beginning from the date AT&T enters an agreement granting access to the facilities of AT&T's long distance affiliate(s). Until that time, AT&T's switch shall be billed at the rates equivalent to that of a US WEST end office switch.

#### 6. Number Portability

- 6.1 AT&T and U S WEST shall provide remote call forwarding functionality, or other INP capabilities, to each other at no charge, in accordance with the provisions of the FCC's First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116 ("FCC Number Portability Order").
- 6.2 The costs incurred by AT&T and U S WEST of providing INP shall be recovered through a broad-based cost recovery mechanism, as described in the FCC Number Portability Order. Costs shall be assessed in an annual surcharge based upon each carrier's number of ported telephone numbers relative to the total number of active telephone numbers in the local service area, as discussed by the FCC in the FCC Number Portability Order, at paragraph 16.
- 6.3<sup>11</sup> In respect to distribution of terminating charges in the context of INP, such charges shall be distributed in a manner consistent with meet-point billing arrangements. Accordingly, there shall be no requirement that all of the terminating interstate or intrastate access charges paid by IXCs on calls forwarded as a result of number portability measures be paid to either AT&T or U S WEST. AT&T and U S WEST shall share in the access revenues received for a ported call. If U S WEST or AT&T is unable to identify the particular IXC carrying a forwarded call for purposes of assessing access charges, the forwarding carrier shall provide the terminating carrier with the necessary information to permit the terminating carrier to issue a bill. The Parties shall work together to incorporate the results of the FCC Access Reform Order when final.
- AT&T may request U S WEST to provide AT&T call detail records identifying each IXC which are sufficient to allow AT&T to render bills to IXCs for calls IXCs place to ported numbers in the U S WEST network which U S WEST forwards to AT&T for termination. To the extent U S WEST is unable to provide billing detail information within a reasonable time

Procedural Order, July 14, 1997, page 16.

MCIm Order, p. 26.

AT&T Order, p. 28 at Issue 50.

frame, the Parties may agree on an interim method to share access revenues pursuant to a mutually agreed upon surrogate approach.

#### 7. Network Elements

- 7.1<sup>12</sup> US WEST may receive compensation for electronic interfaces as an initial access fee for its expenditures at such time as the completion of the gateway interfaces are effected. The reimbursement for such expenditures shall be apportioned among all end users of the gateway interfaces in Arizona, including US WEST. US WEST and AT&T acknowledge that the specific cost-sharing mechanism for electronic interfaces shall be determined by a generic proceeding held by the Commission for this purpose.
- 7.2 [Intentionally left blank for numbering consistency]
- 7.3<sup>13</sup> The expense of rebranding operator services and directory assistance, if requested by AT&T, shall be included as a forward looking economic cost, such cost to be resolved in the future proceeding to be conducted by the Commission as it considers cost studies.
- 7.4<sup>14</sup> Until rates are established by the Commission pursuant to a rate determination proceeding based upon cost studies, interim rates shall apply. At such time as said rates are established, a true-up will occur.<sup>15</sup>

#### 8. Rate Schedule

8.1 Interim rates for interconnection, unbundled Network Elements, Ancillary Services, and Reciprocal Compensation are provided in Schedule 1 to this Attachment 1.

<sup>&</sup>lt;sup>12</sup> AT&T Order, p. 26 at Issue 45.

<sup>&</sup>lt;sup>13</sup> AT&T Order, p. 18 at Issue 30.

<sup>14</sup> AT&T Order, p. 37.

<sup>&</sup>lt;sup>15</sup> AT&T Order, p. 3 and MClm Order, p.3.

# ARIZONA U S WEST and AT&T INTERIM PRICE LIST

# UNBUNDLED NETWORK ELEMENTS

Unbundled Loop		•
Network Interface Device, New Customer, Recurring		\$0.2550
Network Interface Device, New Customer, Nonrecurring		\$30.19
Loop Distribution		BFR
Loop Concentrator		BFR
Loop Feeder		BFR
ALL HAMP LAND DOWN		S21.76
Unbundled 2 Wire Loop, Recurring		\$41.63
Unbundled 4 Wire Loop, Recurring		341.03
Residence Nonrecurring		\$41.83
Business Nonrecurring		\$45.67
Cable Unloading and Bridge Tap Removal, One-Time Charge		\$140.00
Extension Technology, Recurring		\$6.75
Switching		•
Usage Per Minute	•	\$0.0035835
Per Port, Recurring		\$1.37
Per Port, Nonrecurring		\$56.03
Entrance Facility		
DS1, Electrical, Recurring		\$89.42
DS3, Electrical, Recurring		\$357.16
DS1, Electrical, Nonrecurring		\$531.65
DS3, Electrical, Nonrecurring		\$630.65
Direct and Dedicated Transport		
DS0 Dedicated, Recurring	•	\$4.26
	Fixed	Per Mile
DS1 - 0 Miles	None	•
DS1 - Over 0 to 8	\$35.98	\$0.65
DS1 - Over 8 to 25	\$35.99	\$0.94
DS1 - Over 25 to 50	\$36.00	\$1.75
DS1 - Over 50	\$36.00	\$1.59
DS3 - 0 Miles	None	None
DS3 - Over 0 to 8	\$243.17	\$13.32
DS3 - Over 8 to 25	\$246.15	\$15.90
DS3 - Over 25 to 50	\$250.66	\$22.91
DS3 - Over 50	\$249.26	\$22.49

# ARIZONA U S WEST and AT&T INTERIM PRICE LIST

# UNBUNDLED NETWORK ELEMENTS

Multiplaying per arrangement		
Multiplexing, per arrangement DS3 to DS1, Recurring		S196.85
DS3 to DS1, Nonrecurring		\$394.50
Common Transport/Tandem Transmission, Per Minute, Per Leg		\$0.000372
		S0.002169
Tandem Switching, Per Minute of Use		30.002103
Signaling (Note 1)		
Entrance Facility		
DS1, Electrical, Recurring		\$44.71
DS3, Electrical, Recurring		\$178.58
DS1, Electrical, Nonrecurring		\$265.83
DS3, Electrical, Nonrecurring		\$315.33
Direct Link Transport	Fixed	Per Mile
DS0 - 0 Miles	None	None
DS0 - Over 0 to 8	\$9.38	\$0.04
DS0 - Over 8 to 25	\$9.38	\$0.05
DS0 - Over 25 to 50	\$9.39	\$0.06
DS0 - Over 50	\$9.39	\$0.05
004 0485	None	None
DS1 - 0 Miles	\$17.99	\$0.33
DS1 - Over 0 to 8	S18.00	\$0.47
DS1 - Over 8 to 25	\$18.00	\$0.88
DS1 - Over 25 to 50	\$18.00	\$0.80
DS1 - Over 50	\$10.00	<b>Q</b> 0.00
DS3 - 0 Miles	None	None
DS3 - Over 0 to 8	\$121.59	\$6.66
DS3 - Over 8 to 25	\$123.08	\$7.95
DS3 - Over 25 to 50	\$125.33	\$11.46
DS3 - Over 50	\$124.63	\$11.25
Multiplaying		
Multiplexing DS1 to DS0, Recurring	•	\$100.04
DS3 to DS1. Recurring		\$98.43
DS1 to DS0, Nonrecurring		\$179.56
DS3 to DS1, Nonrecurring		\$197.25
D33 to D31, Nothecorning		
CCS Link First Link, Nonrecurring	٠.	\$237.89
CCS Link Each additional Link, Nonrecurring		\$34.14
STP Port Per Port, Recurring		\$104.29
31F FUIL - FEI FUIL, NECOTING		<del>-</del>
Signaling Link		
First Link, Recurring		\$9.87
Additional Link, Recurring		\$9.87
COD/Databases Per Moseage		\$0,00079
SCP/Databases Per Message		Q0.00013

# ARIZONA US WEST and AT&T INTERIM PRICE LIST

#### ANCILLARY SERVICES

Directory Assistance Price per Call Facilities-Based Providers	\$0.28
Listings Primary Listings, Directory Assistance, White & Yellow Pages	No Charge
E911 LEC and CLECs recover costs from PSAP	No Charge
Assignment of Numbers Assignments per industry guidelines	No Charge
Busy Line Verification Per Call	\$0.72
Busy Line Interrupt Per Call	\$0.87
Interim Number Portability	
Service Establishment, Per Route, Per Switch, Nonrecurring Service Establishment, Per Ported Number, Nonrecurring Service Establishment, Additional and Consecutive Numbers Per Number Ported, Nonrecurring	\$20.65 \$4.47 \$3.32
PHYSICAL AND VIRTUAL COLLOCATION	
Common Elements  Quote Preparation Fee, Nonrecurring	\$1,055.76
Cable Splicing Per Setup, Nonrecurring Per Fiber Spliced, Nonrecurring	\$439.50 \$27.15
48 Volt Power, Per Ampere, Recurring, Per Month	\$12.89
48 Volt Power Cable 20 Ampere Capacity - Recurring 40 Ampere Capacity - Recurring 60 Ampere Capacity - Recurring 20 Ampere Capacity - Nonrecurring 40 Ampere Capacity - Nonrecurring 60 Ampere Capacity - Nonrecurring	\$0.21 \$0.29 \$0.35 \$59.14 \$80.69 \$95.34
Equipment Bay, Per Shelf Rack Space, Recurring	\$6.41
Inspector per 1/2 Hour, Regular Inspector per 1/2 Hour, After Hours	\$24.49 \$36.24
Training per 1/2 Hour	\$23.95

# ARIZONA U S WEST and AT&T INTERIM PRICE LIST

# PHYSICAL AND VIRTUAL COLLOCATION (Note 2)

Common Elements	
Engineering per 1/2 Hour, Regular	\$24.55
Engineering per 1/2 Hour, After Hours	\$35.25
Engineering per 1/2 float, After floats	***************************************
Installation per 1/2 Hour, Regular	\$23.73
Installation per 1/2 Hour, After Hours	\$33.20
instantion por the field file file file file file file file file	**
Maintenance per 1/2 Hour, Regular	\$22.20
Maintenance per 1/2 Hour, After Hours	\$31.57
mantenance per 112 float, fater floate	
Element Group 1	
Entrance Facility - 2 fibers, Recurring	\$1.52
Entrance Facility - 2 fibers, Nonrecurring	\$1,514.67
Entrance Facility • 2 libers, Normeconning	01,014.01
EICT Channel Terminations	
2-wire DS0 EICT, Recurring	\$0.44
4-wire DS0 EICT, Recurring	\$0.86
DS1 EICT, Recurring	\$4.28
DOI CIOT, Necuring	\$14.98
DS3 EICT, Recurring	\$141.54
2-wire DS0 EICT, Nonrecurring	
4-wire DS0 EICT, Nonrecurring	\$141.54
DS1 EICT, Nonrecurring	\$160.62
DS3 EICT, Nonrecurring	\$161.46
CIOT D	
EICT Regeneration	\$6.30
DS1 EICT, Regeneration, Recurring	\$41.32
DS3 EICT, Regeneration, Recurring	\$41.32 \$160.62
DS1 EICT, Regeneration, Nonrecurring	
DS3 EICT, Regeneration, Nonrecurring	\$161.46
	•
Floment Group 2	
Element Group 2 Entrance Enclosure:	
	\$13.81
Manhole - Per Month Per Manhole	\$7.61
Handhold - Per Month Per Handhold	\$7.01
Conduit & Interduct im Entrance Enclosure to Cable Vault, Per Foot/Month	\$0.21
Core Drill, Per Core, Nonrecurring	\$181.57
Riser from Cable Vault to Customer Designated Equipment, Per Foot/Month	\$0.24
Fiber Optic Cable (24 Fiber Increment), Per Foot/Month	\$0.03
, 100, 0 pt	
Fiber Placement in conduit and riser, Per Foot	\$0.83
Copper Cable 25 Pair, Per Month	\$0.006
Copper Cable Splicing - Per Splice	\$45.64
Copper Cable Placement in Conduit and Riser - Per Foot	\$0.83
Coax Cable RG59 - Per Foot Per Month	\$0.10
AC Power Per WATT, Per Month	\$0.03
Humidification Per lEased Physical Space	\$28.23

# ARIZONÁ U S WEST and AT&T INTERIM PRICE LIST

Cage/Hard Wall Enclosure	See Attachment 1, Section 3.6
Rent (w/ Maintenance) - per square foot Zone 1, Recurring	\$2.75
Rent (w/ Maintenance) - per square foot Zone 2, Recurring	\$2.26
Rent (w/ Maintenance) - per square foot Zone 3, Recurring	\$2.06

# RESALE

Customer Transfer Charge Business Residence ISDN	\$30.80 \$29.57 \$31.08
Resale Discount	17%

- When purchasing signaling links, AT&T will pay the appropriate Entrance Facility, Direct Link Transport, and Multiplexing price, plus the Signaling Link and CCS Link Price.
   When purchasing Collocation, AT&T will pay the listed price for elements in Element Group 1 and Element Group 2.

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# **RESALE**

#### 1. Description

- 1.1¹ AT&T may resell to any and all classes of end-users Telecommunications Services obtained from US WEST under this Agreement, except for Centrex and Lifeline Assistance/Link-Up (or similar) services, which AT&T may only resell to those subscribers who are eligible for such services. US WEST will not prohibit, nor impose unreasonable or discriminatory conditions or limitations on the resale of its Telecommunications Services. AT&T may not resell residential service to business customers, and business service may not be resold to residential customers. The foregoing shall permit the resale of Telecommunications Services to another Reseller.
- 1.2<sup>2</sup> U S WEST will also make the following services available for resale: residence basic exchange, Centrex Plus, Operator Services, Directory Assistance, Optional Calling Plans, Volume Discount Plans, Discounted Feature Packages, Private Line Transport, negotiated contract arrangements, Business Basic Exchange, PBX Trunks, Frame Relay Service, ISDN, listings, features, intraLATA toll, AIN Services and WATS. This list of services is neither all inclusive nor exclusive.
- 1.3 At the request of AT&T, and pursuant to the requirements of the Act, and FCC rules and state regulations, USWEST shall make available to AT&T for resale any Telecommunications Services that USWEST currently provides or may offer hereafter, including, but not limited to, Telecommunications Services offered through contract service arrangements, special arrangements, discount plans and promotions of more than ninety (90) days duration. Resale discounts may vary from the standard resale discount, subject to the approval of the Commission. USWEST shall also provide Service Functions, as agreed to in this Attachment 2. The Telecommunications Services and Service Functions provided by USWEST to AT&T pursuant to this Attachment 2 are collectively referred to as "Local Resale".
- 1.4 This Section 1 describes several services which U S WEST shall make available to AT&T for resale pursuant to this Agreement. This description of services is neither all inclusive nor exclusive. Except as may be noted elsewhere in this Agreement, all services or offerings of U S WEST which are to be offered for resale pursuant to the Act are subject to the terms herein, even though they are not specifically enumerated or described.
- 1.53 Voice mail and inside wire are not available for purchase at the wholesale or discount rate; provided, however, that nothing in this Agreement shall prevent AT&T from requesting voice mail and inside wire at the retail rates for resale.

MCIm Order, p. 13 at Issue 21 and AT&T Order, p.16at Issue 29.

MCIm Order, p. 13 at Issue 21 and AT&T Order, p. 16 at Issue 29.

MCIm Order, p. 12 at Issue 21 and AT&T Order, pp. 14-15 at Issue 27.

#### 1.5.1 Voice Mail

U S WEST shall make available the SMDI-E ("Station Message Desk Interface-Enhanced"), where available, or SMDI (Station Message Desk Interface), where SMDI-E is not available, feature capability allowing for Voice Mail Services. U S WEST shall make available, where available, the MWI (Message Waiting Indicator) stutter dialtone and message waiting light feature capabilities. U S WEST shall make available CF-B/DA (Call Forward on Busy/Don't Answer), CF/B (Call Forward on Busy), and CF/DA (Call Forward Don't Answer) feature capabilities allowing for Voice Mail services.

#### 1.6 Grandfathered Services

US WEST shall offer for resale to AT&T all grandfathered services. For purposes of this Agreement, a grandfathered service is a service that US WEST no longer offers to new subscribers or a class of new subscribers. AT&T shall be notified of any US WEST request for the termination of service and/or its grandfathering filed with the Commission or US WEST's intent to grandfather/withdraw a service at least thirty (30) calendar days prior to the effective date of such grandfathering or intended termination. The form of notification may be either in written or electronic form.

#### 1.7 N11 Service

AT&T shall have the right to resell any N11 service, including, but not limited to, 411 and 911 services.

#### 1.8 Promotions

Promotions of ninety (90) days or less need not be made available to AT&T at the wholesale discount rate.

1.9 The specific business process requirements and systems interface requirements are set forth in Attachments 5 and 6.

# 2. General Terms and Conditions for Resale

- 2.1 Primary Local Exchange Carrier Selection. U S WEST shall apply the principles set forth in Section 64.1100 of the FCC Rules, 47 C.F.R. § 64.1100, as implemented, to the process for end-user selection of a primary local exchange carrier. In accordance with the customer authorization process described elsewhere in this Agreement, U S WEST shall not require notification from the customer, another carrier, or another entity, in order to process an AT&T order for local service for a customer.
- 2.2 Except where otherwise provided, AT&T, or AT&T's agent, shall act as the single point of contact for its end users' service needs, including, without limitation, sales, service design, order taking, provision, change orders, training, maintenance, trouble reports, repair, post-sale servicing, billing, collection and inquiry. AT&T shall inform its end users that they are

MCIm Order, p. 12 at Issue 21.

customers of AT&T for resold services. AT&T's end users who inadvertently contact USWEST with questions regarding their AT&T service will be instructed to contact AT&T. USWEST end users who inadvertently contact AT&T with questions regarding their USWEST service will be instructed to contact USWEST. Nothing in this Agreement shall be deemed to prohibit either Party from discussing its products and services with customers of the other Party who solicit such information or who are directly contacted by a Party.

# 3. Basic Service Requirements

#### 3.1 Call Types

- 3.1.1 US WEST shall provide the following call types, features and functions to AT&T and its end users with no loss of feature or functionality: (a) dial tone and ringing; (b) capability for either dial pulse or touch tone; (c) flat and measured services; (d) speech recognition as available with other custom calling and CLASS features; (e) same extended area service free calling area; (f) 1 + intraLATA toll calling; (g) access to interLATA toll calling; (h) access to international calling; (i) lines as well as trunks (DID, DOD); (j) analog and digital private line all speeds; (k) off-premises extensions; (l) Centrex; and (m) ISDN.
- 3.2 U S WEST will provide access for AT&T and all its end user customers to all call types, including, but not limited to, 500, 700, 800, 900, exchanges and dial around services (10XXX).
- 3.3 U S WEST shall impose no restrictions on customer's calling (e.g., there should not be a 750 minute limit on flat rate calling).
- 3.4 U S WEST will provide pre-subscription services for intraLATA and interLATA toll services in accordance with currently accepted methods and procedures.

# 3.5 Features Requirements

- 3.5.1 U S WEST will provide AT&T the ability to suspend and restore customer service, including vacation suspension service, at the direction of AT&T.
- 3.5.2 End Office Features. U S WEST will provide to AT&T the same end office features available to U S WEST's end users, including, but not limited to, CLASS features, Custom Calling features, and AIN features.
- 3.5.3 Call Blocking Features. U S WEST will provide to AT&T the same call blocking features as are available to U S WEST's own Customers.
- 3.6 Upon request, U S WEST shall provide AT&T a list, in an agreed upon format by central office, of all the Telecommunications Services, features and functions offered by U S WEST within sixty (60) days after the Effective Date of this Agreement and shall provide updates to such lists as further described in Attachment 5. U S WEST shall also provide an electronic access method for AT&T to ascertain the service availability of a particular USOC in a given central office.

# 4. Requirements for Specific Services

#### 4.1 IntraLATA Toll

U S WEST will provide AT&T its intraLATA toll service to AT&T for resale where 1+ intraLATA toll presubscription is not available.

#### 4.2 Private Line Services

The following private line services shall be made available without restriction from USWEST: (a) voice grade private line services; (b) off premise extensions; (c) foreign exchange line service; (d) point-to-point and multi-point digital services (e.g., 9.6 kbps-56 kbps; fractional DS-1); (e) DS-1 Services; (f) DS-3 services; (g) OC-3 service (where available); (h) frame relay service; (i) packet switched services; (j) switched digital services; and (k) other private line services as they are made available.

#### 4.3 Centrex Requirements

- 4.3.1 At AT&T's option and as they are available to U S WEST's own end users via interstate tariffs and state tariffs, price lists, price schedules, catalogs, or Individual Case Basis, AT&T may purchase a single, any combination, or the entire set of Centrex features, including Centrex Management System (CMS) or its equivalent as described in Attachment 5. The Centrex service provided for resale will meet the requirements set forth in the following provisions of this Section.
- 4.3.2 All service levels and features of Centrex service provided by U S WEST for resale by AT&T shall be at parity with levels and features provided to U S WEST's own customers or as mutually agreed upon by the Parties.
- 4.3.3 AT&T may aggregate the Centrex local exchange and intraLATA traffic usage of AT&T subscribers to the extent U S WEST makes such aggregation available to itself or to its end users, Customers, or Affiliates.
- 4.3.4 AT&T may aggregate multiple AT&T customers on dedicated access facilities.
- 4.3.5 U S WEST shall make CMS information available to AT&T at the common block level via an electronic interface, as provided to U S WEST's own end users.
- 4.3.6 AT&T may use remote call forwarding in conjunction with Centrex service to provide service to AT&T local service Customers residing outside of the geographic territory in which U S WEST provides local exchange service. However, U S WEST is not obligated to provide facilities outside its service territory.
- 4.3.7 AT&T may purchase any and all levels of Centrex service for resale, without restriction on the minimum or maximum number of lines that may be purchased for any one level of service, equivalent to what is offered to USWEST's own end users.
- 4.3.8 U S WEST will provide to AT&T the ability to suppress the need for AT&T customers to dial "9" when placing calls outside the Centrex system.

4.3.9 USWEST shall make available to AT&T for resale, at no additional charge, intercom calling among all AT&T customers within a common block who utilize resold Centrex service.

# 4.4 CLASS and Custom Features Requirements

AT&T may purchase a single, any combination, or the entire set of CLASS and custom features and functions, on a customer-specific basis. CLASS features shall include, but not be limited to: caller identification, name and number, call screening; call tracing; and automatic call back on busy (\*69). U S WEST shall provide to AT&T a list of all such CLASS and custom features and functions within ten (10) days of the Effective Date of this Agreement and shall provide updates to such list when new features and functions become available.

#### 4.5 Customer Financial Assistance Programs

- 4.5.1 Local services provided to low-income subscribers, pursuant to requirements established by the appropriate state regulatory body, include programs such as Lifeline, Voluntary Federal Customer Financial Assistance Program, and Link-Up America ("Voluntary Federal Customer Financial Assistance Programs"). When a USWEST subscriber eligible for the Voluntary Federal Subscriber Financial Assistance Programs or other similar state programs chooses to obtain local service from AT&T, USWEST shall forward information available to USWEST regarding such subscriber's eligibility to participate in such programs to AT&T and in electronic format when available in accordance with the procedures set forth herein.
- 4.5.2 US WEST shall offer for resale Lifeline and Link-Up Service; provided, however, that AT&T may only resell Lifeline and Link-Up Service to those Customers eligible to receive such services. Relay services are not available for resale and shall be kept centralized with US WEST. US WEST will provide information about the certification process for the provisioning of Lifeline, Link-up, and similar services. US WEST will forward to AT&T, in electronic format (when available), information available to US WEST regarding a subscriber's program eligibility, status and certification when a US WEST subscriber currently on any US WEST telephone assistance program changes service to AT&T as their local exchange carrier. US WEST will cooperate in obtaining any subsidy associated with a subscriber transfer to AT&T.
  - 4.5.2.1 In connection with the transfer of a customer from USWEST to AT&T, USWEST shall provide to AT&T a customer profile, including customer name, billing and residence address, billing telephone number(s), eligibility for Voluntary Federal Customer Financial

AT&T Order, p. 14 at Issue 27.

AT&T Order, p. 14 at Issue 27.

Assistance Program, and other similar services, and identification of US WEST features and services subscribed to by the customer.

#### 4.6 Discount Plans and Services

- 4.6.1 In accordance with FCC rules and regulations, U S WEST shall offer for resale all Discount Plans and Services.
- 4.6.2 AT&T can utilize any volume discounts that U S WEST makes available to its end user customers.

# 4.7 Hospitality Service

U S WEST shall provide all blocking, screening, and all other applicable functions available for hospitality lines utilized as such.

- Telephone Line Number Calling Cards. Effective ten (10) Business Days after the date of an end-user's subscription to AT&T service or within twenty-four (24) hours after AT&T has notified U S WEST that it has replaced the subscriber's calling card, whichever is earlier, U S WEST will terminate its existing telephone line number-based calling cards and deactivate any U S WEST-assigned telephone line calling card number subaccount and PIN (including area code) ("TLN") from the LIDB. AT&T may issue a new telephone calling card to such customer, utilizing the same TLN, and AT&T shall have the right to enter such TLN in the LIDB for calling card validation purposes. U S WEST will assume responsibility for billing its calling card calls that appear before the card is terminated. Nothing in this section shall prohibit U S WEST from terminating calling card service to U S WEST customers who have been determined to be a credit risk, according to U S WEST's normal business practices.
  - 4.8.1 Except as provided above, the Parties will cooperate in the deactivation and activation of calling cards and will make reasonable efforts to minimize the time a customer is without an active calling card.
  - 4.8.2 U S WEST shall not prohibit AT&T from issuing a new telephone calling card to an AT&T customer utilizing the same TLN and AT&T shall have the right to enter the TLN in the LIDB for calling card verification purposes.
  - 4.8.3 U S WEST will provide AT&T the ability to utilize U S WEST's LIDB for calling card validation.
- 4.9 U S WEST shall make engineering support available to AT&T for Resale Services on the same basis as it provides such support for U S WEST end users. To the extent the cost of such engineering support has been considered an avoided cost in the development of the avoided cost discount, the cost of such engineering support shall be borne by AT&T.

AT&T Order, p. 14 at Issue 27.

#### 4.10 Payphone Services

U S WEST agrees to sell for resale all tariffed PAL services at a appropriate wholesale discount to be determined by the Commission.

4.10.1 US WEST shall offer for resale, at a minimum, the following Coin Line, PAL, and PAL Coinless features:

Billed Number Screening
Ability to "freeze" PIC selection
One (1) bill per line and/or multiple lines per BAN
Point of demarcation at the Network Interface location
Detailed billing showing all 1+ traffic on paper, diskette or electronic format
Touch-tone service
Option for listed or non-listed numbers
Access to 911 service
One (1) directory per line

- 4.10.2 At a minimum, U S WEST shall offer for resale the following Coin Line features:
  - Access to all central office intelligence required to perform answer detection, coin collection, coin return, and disconnect
  - · Answer Detection
  - · Option to block all 1+ calls to international destinations
  - IntraLATA Call Timing
  - · Option of one-way or two-way service on line
  - · Flat Rate Service, where available
  - Originating line screening
  - U S WEST central office intelligence for rating and other functions
  - · Option of measured service, where available
  - Ability to block any 1+ service that cannot be rated by the coin circuits/TSPS/OSPS to the extent provided on U S WEST coin lines
  - Protect against clip on fraud to the extent provided on U S WEST coin lines
  - Protect against blue box fraud to the extent provided on U S WEST coin lines
  - Provision of Information Digit 27
- 4.10.3 At a minimum, U S WEST shall offer for resale the following PAL and PAL Coinless features:
  - · Originating line screening
  - Two-way service option
  - Flat rate service based on rate groups, where available
  - · Option of one-way service on the line, where available
  - Option of measured service, where available
  - Ability to keep existing serving telephone numbers if cutover to AT&T
  - AT&T resale line incoming/outgoing screening
  - Provision of Information Digit 07
  - Provision of International Toll Denial Recognition Tone, when available

- 4.10.4 At a minimum, U S WEST shall offer for resale the following PAL Coin feature:
  - Blocking for 1+ international, 10XXXX1 + international, 101XXXX1 + international, 1+900, N11, 976 and option to block all 1-700 and 1-500 calls
  - Line side supervision option
- 4.10.5 At a minimum, U S WEST shall offer for resale the following PAL Coinless feature:
  - Blocking for 1 + international, 10XXXX1 + international, 101XXXX1 +International, 1+900, N11, 976, and 7 digit local
- 4.10.7 USWEST shall provide installation intervals to AT&T for ordering, call transfer, billing, and PIC changes in accordance with performance standards that are established by the Commission, pursuant to subsequent agreement between the Parties or as provided to any other Person.

#### 5. Service Functions

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- 5.1 U S WEST shall provide AT&T with the information available to U S WEST that AT&T will need to certify subscribers who transfer from U S WEST as exempt from charges (including taxes), or eligible for reduced charges associated with providing services.
- 5.2 U S WEST shall provide AT&T with appropriate notification of all area transfers with line level detail one hundred twenty (120) days before service transfer, and will also notify AT&T within one hundred twenty (120) days before such change or any LATA boundary changes.
- 5.3 U S WEST will work cooperatively with AT&T in practices and procedures regarding the handling of law enforcement and service annoyance calls.
- 5.4 Support Functions
  - 5.4.1 Routing to Directory Assistance, Operator and Other Services
    - 5.4.1.1 US WEST shall make available to AT&T the ability to route:
      - (a) all Local Directory Assistance calls (411, (NPA) 555-1212) dialed by AT&T Customers directly to the AT&T Directory Assistance Services platform, where technically feasible and consistent with FCC rules; and
      - (b) Local Operator Services calls (O+, O-) dialed by AT&T Customers directly to the AT&T Local Operator Services platform, where technically feasible and consistent with FCC rules. Such traffic shall be routed over trunk groups between USWEST end offices and the AT&T Local Operator Services Platform, using standard Operator Services dialing protocols of O+ or O-.
    - 5.4.1.2 All direct routing capabilities described herein shall permit AT&T Customers to dial the same telephone numbers for AT&T Directory Assistance and Local Operator Service as USWEST customers use to access similar services.

## 6. Security and Law

- 6.1 U S WEST will maintain and safeguard all AT&T customer information according to CPNI privacy guidelines.
- 6.2 U S WEST and AT&T will work jointly in security matters as they relate to AT&T customers in a resale environment including, but not limited to, harassment and annoyance calls.
- 6.3 U S WEST and AT&T will work jointly to support law enforcement agency requirements including, but not limited to, taps, traces and court orders.
- 6.4 US WEST will work jointly with AT&T with respect to prevention and settlement of fraud.
- 6.5 US WEST and AT&T will work jointly to provide access to lines in a hostage situation.

### 7. Ordering and Maintenance

- AT&T shall transmit to USWEST the information necessary for the installation (billing, listing and other information), repair, maintenance and post-installation servicing according to USWEST's standard procedures, as described in the USWEST resale operations guide that will be provided to AT&T. When USWEST's end user or the end user's new service provider discontinues the end user's service in anticipation of moving to another service provider, USWEST will render its closing bill to the end user effective with the disconnection. Should AT&T's end user, a new service provider or AT&T request service be discontinued to the end user, USWEST will issue a bill to AT&T for that portion of the service provided to the AT&T end user. In no event, shall the transition of an end user from USWEST to AT&T cause a disconnection of service other than as specifically provided for in this Agreement. It is understood that AT&T's decision to request a change in class of service (or a conversion to a re-used unbundled loop) at "transition" may involve a few minutes out-of-service. The preceding may be modified by agreement of the Parties.
- 7.2 U S WEST will notify AT&T by fax or other processes as agreed to by the Parties, when an end user moves to another service provider.
- 7.3 The new service provider shall be responsible for issuing either a transfer of service or disconnect/new connect order, as appropriate.
- 7.4 The Parties agree that they will work cooperatively to develop the standards and processes applicable to the transfer of such accounts that are in arrears.

### 8. Changes in Retail Service

8.1 US WEST will notify AT&T of any changes in the terms and conditions under which it offers Telecommunications Services at retail to subscribers who are not telecommunications service providers or carriers, including, but not limited to, the introduction or discontinuance of any features, functions, services or promotions.

Such notification shall be through USWEST's filing for Commission approval of such matters.8

- 8.2 U S WEST will provide to AT&T advance notice of the availability of new Telecommunication Services in accordance with Section 23.2 of Part A of this Agreement.
- 8.3 In the event U S WEST intends to terminate the provisioning of any resold services to AT&T for any reason, AT&T shall be responsible for providing any and all necessary notice to its end users of the termination. In no case shall U S WEST be responsible for providing such notice to AT&T's end users. U S WEST will provide sufficient written notice to AT&T of U S WEST's intent to terminate a resold service so that AT&T may notify its customers or intervene in the proceedings on a timely basis consistent with Commission rules and notice requirements.

## 9. Customer Authorization Process

- 9.1 U S WEST and AT&T will use the existing PIC process as a model, and the same or similar procedures for changes of local providers. For a local carrier change initiated by AT&T or an agent of AT&T to a customer, one of the following four (4) procedures will constitute authorization for the change: (a) Obtain the customer's written authorization (letter of authorization or LOA); (b) Obtain the customer's electronic authorization by use of an toll-free number; (c) Have the customer's oral authorization verified by an independent third party (third party verification); or (d) Send an information package, including a prepaid, returnable postcard, within three (3) days of the customer's request for a local carrier change, and wait fourteen (14) days before submitting the local carrier change to the previous carrier.
- 9.2 It is understood by U S WEST and AT&T that these procedures may be superseded or modified by FCC rules or industry standards.
- 9.3 U S WEST will provide AT&T authorization for a local carrier change that is initiated by a customer call to AT&T. In this case AT&T will: (a) maintain internal records verifying the customer's stated intent to switch carriers; and (b) produce the record in case of a slamming dispute consistent with FCC rules.
- 9.4 Should an end user dispute or a discrepancy arise regarding the authority of AT&T to act on behalf of the end user, AT&T is responsible for providing a written response evidencing its authority to U S WEST within five (5) Business Days of receipt of a written request from U S WEST describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or AT&T does not provide a response within five (5) Business Days, U S WEST shall honor the designation of the end user. In the event the end user designation is honored by U S WEST as described above, then AT&T shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission Rules.
- 9.5 Should an end user dispute or a discrepancy arise regarding the authority of U S WEST to act on behalf of the end user, U S WEST is responsible for providing a written response evidencing its authority to AT&T within five (5) Business Days of receipt of a written request

AT&T Order, p. 22 at Issue 39(a).

from AT&T describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or U S WEST does not provide a response within five (5) Business Days, AT&T shall honor the designation of the end user. In the event the end user designation is honored by AT&T as described above, then U S WEST shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission rules.

- 9.6 AT&T shall designate the Primary Interexchange Carrier (PIC) assignments on behalf of its end users for interLATA services and for intraLATA services when intraLATA presubscription is implemented.
  - 9.6.1 US WEST is not required to assign central office codes in a US WEST central office for the exclusive use of AT&T.9
- 9.7 When Customers switch from USWEST to AT&T, or to AT&T from any other service provider, such Customers shall be permitted to retain their current telephone numbers if they so desire and if they do not change their service address to an address served by a different central office. USWEST shall take no action to prevent AT&T Customers from retaining their current telephone numbers.

### 10. AT&T Responsibilities

- 10.1 AT&T must send to U S WEST either (a) complete and accurate end user listing information for Directory Assistance and 911 Emergency Services using processes mutually agreed to by the Parties, or (b) notification of as is migration. AT&T must provide to U S WEST accurate end user information to ensure appropriate listings in any databases in which U S WEST retains and/or maintains end user information. AT&T assumes liability for the accuracy of information provided to U S WEST. After receiving accurate information from AT&T, U S WEST assumes liability for the accuracy of transmission of such information to the database provider (e.g., SCC).
- 10.2 US WEST shall provide AT&T with the capability to assign large quantities (i.e., greater than ten (10)) telephone numbers for multiple line and PBX customers in accordance with US WEST's tariffs and/or its own internal practices.
- 10.3 AT&T will provide a three (3) year non-binding forecast within ninety (90) days of the Effective Date of this Agreement. The forecast shall be updated and provided to U S WEST on a quarterly basis. The initial forecast will provide:
  - The date service will be offered (by city and/or state)
  - · The type and quantity of service(s) which will be offered
  - AT&T's anticipated order volume
  - AT&T's key contact personnel

AT&T Order, p. 30 at Issue 59.

### 11. Pricing

The wholesale discount rate charged to AT&T for Local Resale is set forth in Attachment 1 of this Agreement.

### 12. Deposit

- 12.1 USWEST may require a suitable deposit to be held by USWEST as a guarantee for payment of USWEST's charges for companies which cannot demonstrate sufficient financial integrity based on commercially reasonable standards, which may include a satisfactory credit rating as determined by a recognized credit rating agency reasonably acceptable to USWEST.
- 12.2 When the service is terminated or when AT&T has established satisfactory credit, if required under the terms of the preceding paragraph, the amount of the initial or additional deposit, with any interest due, will, at AT&T's option, be either credited to AT&T's account or refunded. Satisfactory credit for AT&T is defined as (a) twelve (12) months positive payment history in another capacity with U S WEST, such as in the interexchange area; (b) financial standing as outlined in the preceding paragraph above; (c) posting a bond, 10 or (d) twelve (12) consecutive months' service as a reseller without a termination for nonpayment and with no more than one (1) notification of intent to terminate service for nonpayment. Interest on the deposit shall be accumulated by U S WEST at a rate equal to the federal prime rate, as published in the Wall Street Journal from time to time.

AT&T Order, p. 21 at Issue 38.

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#### UNBUNDLED ACCESS/ELEMENTS

#### 1. Introduction

1.1 U S WEST shall provide unbundled Network Elements in accordance with this Agreement, the Act, FCC rules and regulations, and state rules, regulations and orders. The price for each Network Element is set forth in Attachment 1 of this Agreement. Except as otherwise set forth in this Attachment, AT&T may order Network Elements as of the Effective Date of this Agreement.

#### 1.2 General Terms

- 1.2.1 US WEST agrees to make available the following unbundled Network Elements which are addressed in more detail in the following sections of this Attachment: (a) local loop, (b) local and tandem switches (including all vertical switching features provided by such switches), (c) interoffice transmission facilities, (d) network interface devices, (e) signaling and call-related database facilities, (f) operations support systems functions, and (g) operator and directory assistance facilities.<sup>1</sup>
- 1.2.2 US WEST shall offer each Network Element individually and in Combinations with any other Network Element or Network Elements in order to permit AT&T to combine such Network Element or Network Elements obtained from US WEST or with network components provided by itself or by third parties to provide Telecommunications Services to its subscribers. AT&T may purchase unbundled Network Elements individually or in Combinations without restrictions as to how those elements may be rebundled.<sup>2</sup>

#### 2. Unbundled Network Elements

- 2.1 US WEST shall offer Network Elements to AT&T on an unbundled basis on rates, terms and conditions that are just, reasonable, and non-discriminatory in accordance with the terms and conditions of this Agreement.
- 2.2 U S WEST shall permit AT&T to connect AT&T's facilities or facilities provided to AT&T by third parties with each of U S WEST's unbundled Network Elements at any technically feasible point designated by AT&T.
- 2.3 AT&T may use one or more Network Elements to provide any feature, function, capability, or service option such Network Element(s) is capable of providing or any feature, function, capability, or service option described in the technical references identified herein, or as may otherwise be determined by AT&T.

MCIm Order, p. 25 and AT&T Order, p. 11 at Issue 18.

MCIm Order, p. 11 at Issue 14 and AT&T Order, p. 13 at Issue 25.

- 2.3.1 AT&T may, at its option, designate any technically feasible method of access to unbundled Network Elements, including access methods currently or previously in use by U S WEST.
- 2.4 AT&T may purchase unbundled Network Elements without restrictions as to how AT&T may rebundle those elements.<sup>3</sup>
- 2.5 For each Network Element, U S WEST shall provide a demarcation point (e.g., at a Digital Signal Cross Connect, DCS, Light Guide Cross Connect panel or a Main Distribution Frame) and, if necessary, access to the AT&T side of such demarcation point, which AT&T agrees is suitable. Where U S WEST provides combined Network Elements at AT&T's direction, however, no demarcation point shall exist between such contiguous Network Elements.
- 2.6 [Intentionally left blank for numbering consistency]
- 2.7 This Attachment describes the initial set of Network Elements which AT&T and U S WEST have identified as of the Effective Date of this Agreement:
  - Loop
  - Network Interface Device
  - Distribution (subject to the BFR)
  - Local Switching
  - Operator Systems
  - Shared Transport
  - Common Transport
  - Dedicated Transport
  - Signaling Link Transport
  - Signaling Transfer Points
  - Service Control Points/Databases
  - · Tandem Switching
  - 911
  - Directory Assistance
- 2.8 AT&T and U S WEST agree that the Network Elements identified in this Attachment are not all of the possible Network Elements.
- 2.9 AT&T may identify additional or revised Network Elements as necessary to provide Telecommunications Services to its subscribers, to improve network or service efficiencies or to accommodate changing technologies, customer demand, or other requirements.
  - 2.9.1 AT&T will request such Network Elements in accordance with the Bona Fide Request process described in Part A of this Agreement. Additionally, if U S WEST provides any Network Element that is not identified in this Agreement to itself, to its own subscribers, to a U S WEST Affiliate or to any other Person, U S WEST shall make available the same Network Element to AT&T on terms and conditions no less favorable to AT&T than those provided to itself or to any other party.

MCIm Order, p. 11 at Issue 14 and AT&T Order, p.13 at Issue 25.

#### 3. Standards for Network Elements

- 3.1 Each Network Element shall be furnished at a service level equal to or better than the requirements set forth in the technical references identified herein for each such Network Element, as well as any performance or other requirements, identified in this Attachment, subject to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
- 3.2 If one or more of the requirements set forth in this Agreement are in conflict, the Parties agree to resolve such conflict in accordance with the dispute resolution provisions of Part A of this Agreement.
  - 3.2.1 US WEST shall provide to AT&T, upon request, engineering, design, performance and other network data sufficient for AT&T to determine that the requirements of this Section 3 are being met. In the event such data indicates that the requirements set forth herein are not being met, US WEST shall, within ten (10) days, cure any design, performance or other deficiency and provide new data sufficient for AT&T to determine that such deficiencies have been cured.
  - 3.2.2 U S WEST agrees to work cooperatively with AT&T to provide Network Elements that will meet AT&T's needs in providing Telecommunications Services to its subscribers.
- 3.3 Unless otherwise requested by AT&T, each Network Element or any Combination thereof and the connections between Network Elements provided by US WEST to AT&T shall be made available to AT&T at any technically feasible point, that is equal to or better than the manner in which US WEST provides such Network Elements, Combinations and connections to itself, its own subscribers, to a US WEST Affiliate or to any other Person.

## **Description of Unbundled Elements**

#### 4. Tandem Switching

U S WEST will provide a tandem switching element ('Tandem Switching") on an unbundled basis. The tandem switch element includes the facilities connecting the trunk distribution frames to the switch, and all the functions of the switch itself, including those facilities that establish a temporary transmission path between two (2) other switches. The definition of the tandem switching element also includes the functions centralized in tandems rather than in separate end office switches, such as call recording, the routing of calls to Operator Services, and signaling conversion functions.

### 4.1 Definition:

Tandem Switching is the function that establishes a communications path between two (2) switching offices through a third switching office (the tandem switch) including, but not limited to, those of AT&T, U S WEST, independent telephone companies (ICOs), IXCs and wireless carriers.

#### 4.2 Technical Requirements

4.2.1 Tandem Switching provided by USWEST to AT&T shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, June 1, 1990. The requirements for Tandem Switching include, but are not limited to, the following:

- 4.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;
- 4.2.1.2 Tandem Switching shall provide screening (digit analysis) and routing as designated by AT&T;
- 4.2.1.3 Where technically feasible, Tandem Switching shall provide recording of all billable events designated by AT&T;
- 4.2.1.4 Tandem Switching shall allow passing of Advanced Intelligent Network triggers supporting AIN features;
- 4.2.1.5 Tandem Switching shall provide connectivity to Operator Systems as designated by AT&T:
- 4.2.1.6 Tandem Switching shall provide access to toll free number portability database where AT&T sends such traffic to a tandem;
- 4.2.1.7 Tandem Switching shall allow the passing of all functions associated with traffic for all trunk interconnection discussed under the "Network Interconnection" section of this Agreement (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));
- 4.2.1.8 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and
- 4.2.1.9 Tandem Switching shall provide connectivity to Transit Traffic to and from other carriers.
- 4.2.2 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IXCs, ICOs, CAPs and CLEC switches.
- 4.2.3 Tandem Switching shall provide local tandeming functionality between two (2) end offices, including two (2) offices belonging to different CLECs (e.g., between an AT&T end office and the end office of another CLEC).
- 4.2.4 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed. Additional signaling information and requirements are provided in Section 15 of this Attachment.
- 4.2.5 Tandem Switching shall record billable events and send them to the area billing centers designated by AT&T. Billing requirements are specified in Attachment 5 of this Agreement.
- 4.2.6 U S WEST shall perform routine testing and fault isolation on the underlying switch providing Tandem Switching and all its Interconnections. When requested by AT&T, the results and reports of the testing shall be made immediately available to AT&T.

- 4.2.7 When requested by AT&T, USWEST shall provide to AT&T for review performance data regarding traffic characteristics or other measurable elements with respect to AT&T traffic.
- 4.2.8 Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on AT&T traffic shall be at parity with controls being provided or imposed on U S WEST traffic (e.g., U S WEST shall not block AT&T traffic and leave its own traffic unaffected or less affected).
- 4.2.9 Tandem Switching shall route calls to U S WEST or AT&T endpoints or platforms (e.g., Operator Services and PSAPs) on a per call basis as designated by AT&T. Detailed primary and overflow routing plans for all interfaces available within the U S WEST switching network shall be mutually agreed to by AT&T and U S WEST. Such plans shall meet AT&T requirements for routing calls through the local network.
- 4.2.10 Tandem Switching shall process originating toll free traffic received from an AT&T local switch.
- 4.2.11 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.
- 4.2.12 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

### 4.3 Interface Requirements

- 4.3.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.
- 4.3.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which U S WEST interconnects.
- 4.3.3 U S WEST shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
- 4.3.4 For applicable call types, Tandem Switching shall interconnect with AT&T's switch, using two-way trunks, for traffic that is transiting via the US WEST network to interLATA or intraLATA carriers. At AT&T's request, Tandem Switching shall record and keep records of traffic for billing.
- 4.3.5 At AT&T's request, Tandem Switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology employed by U S WEST as designated by AT&T.
- 4.4 Tandem Switching shall meet or exceed each of the requirements for Tandem Switching set forth in the following technical references:

- 4.4.1 Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, June 1, 1990;
- 4.4.2 GR-905-CORE covering CCSNIS;
- 4.4.3 GR-1429-CORE for call management features; and
- 4.4.4 GR-2863-CORE and GR-2902-CORE for CCS AIN interconnection.

## 5. Shared Transport

US WEST will provide unbundled access to US WEST transmission facilities between end offices, end offices and the tandem switch, and the tandem switch and end offices for completing local calls. Such transmission facilities would be shared with US WEST and, as applicable, with other CLECs. Transport routing shall be on an identical basis as routing is performed by US WEST, providing the same efficiencies that US WEST employs for itself. Costs will be allocated appropriately based upon the transmission path taken by each call. Shared transport shall meet the technical specifications as itemized below for Common Transport. Access to shared transport facilities shall be limited to US WEST's existing interoffice facilities.<sup>4</sup>

## 6. Common Transport

#### 6.1 Definition

Common Transport is an interoffice transmission path between USWEST Network Elements shared by carriers. Where USWEST Network Elements are connected by intraoffice wiring, such wiring is provided as a part of the Network Elements and is not Common Transport. USWEST shall offer Common Transport as of the Effective Date of this Agreement, at DS-0, DS-1, DS-3, STS-1 or higher transmission bit rate circuits. Common Transport consists of USWEST inter-office transport facilities and is distinct and separate from Local Switching.

#### 6.2 Technical Requirements

- 6.2.1 U S WEST shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities used to provide Common Transport.
- 6.2.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a minimum, Common Transport shall meet all of the requirements set forth in the following technical references, as applicable for the transport technology being used:
  - 6.2.2.1 ANSI T1.101-1994, American National Standard for Telecommunications-Synchronization Interface Standard Performance and Availability;

Arizona Bench Order, May 29, 1997, p. 1537, Procedural Order, July 14, 1997 at pages 16-17.

- 6.2.2.2 ANSI T1.102-1993, American National Standard for Telecommunications
   Digital Hierarchy Electrical Interfaces;
- 6.2.2.3 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;
- 6.2.2.4 ANSI T1.105-1995, American National Standard for Telecommunications
   Synchronous Optical Network (SONET) Basic Description including
   Multiplex Structure, Rates and Formats;
- 6.2.2.5 ANSI T1.105.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Automatic Protection Switching;
- 6.2.2.6 ANSI T1.105.02-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Payload Mappings;
- 6.2.2.7 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
- 6.2.2.8 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET)-Jitter at Network Interfaces - DS-1 Supplement;
- 6.2.2.9 ANSI T1.105.05-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Tandem Connection:
- 6.2.2.10 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 6.2.2.11 ANSI T1.105.07-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Sub STS-1 Interface Rates and Formats;
- 6.2.2.12 ANSI T1.105.09-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Network Element Timing and Synchronization;
- 6.2.2.13 ANSI T1.106-1988, American National Standard for Telecommunications
   Digital Hierarchy Optical Interface Specifications (Single Mode);
- 6.2.2.14 ANSI T1.107-1988, American National Standard for Telecommunications Digital Hierarchy Formats Specifications;
- 6.2.2.15 ANSI T1.107a-1990, American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications (DS3 Format Applications);

- 6.2.2.16 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 6.2.2.17 ANSI T1.117-1991, American National Standard for Telecommunications
   Digital Hierarchy Optical Interface Specifications (SONET) (Single Mode Short Reach):
- 6.2.2.18 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
- 6.2.2.19 ANSI T1.404-1994, Network-to-Subscriber Installation DS-3 Metallic Interface Specification;
- 6.2.2.20 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 6.2.2.21 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 6.2.2.22 Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 6.2.2.23 Bellcore GR-820-CORE, Generic Transmission Surveillance: DS-1 & DS-3 Performance;
- 6.2.2.24 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria;
- 6.2.2.25 Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993) (A module of LSSGR, FR-NWT-000064.);
- 6.2.2.26 Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access;
- 6.2.2.27 Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991;
- 6.2.2.28 Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue 1, May 1989;and
- 6.2.2.29 Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition, Issue 1, August 1989.

## 7. Dedicated Transport

#### 7.1 Definition:

Dedicated Transport is an interoffice transmission path between AT&T designated locations to which AT&T is granted exclusive use. Such locations may include U S WEST central offices or other locations, AT&T network components, other carrier network components, or subscriber premises.

- 7.1.2 US WEST shall offer Dedicated Transport in each of the following manners:
  - 7.1.2.1 as capacity on a shared facility;
  - 7.1.2.2. as a circuit (e.g., DS-1, DS-3, STS-1) dedicated to AT&T; and
  - 7.1.2.3 as a system (i.e., the equipment and facilities used to provide Dedicated Transport such as SONET ring) dedicated to AT&T.
- 7.1.3 When Dedicated Transport is provided as a circuit or as capacity on a shared facility, it shall include, as appropriate:
  - 7.1.3.1 multiplexing functionality;
  - 7.1.3.2 grooming functionality; and,
  - 7.1.3.3 redundant equipment and facilities necessary to support protection and restoration.
- 7.1.4 When Dedicated Transport is provided as a system, it shall include:
  - 7.1.4.1 transmission equipment such as multiplexers, line terminating equipment, amplifiers, and regenerators;
  - 7.1.4.2 inter-office transmission facilities such as optical fiber, dark fiber<sup>5</sup>, copper twisted pair, and coaxial cable;
  - 7.1.4.3 redundant equipment and facilities necessary to support protection and restoration; and
  - 7.1.4.4 access to the Digital Cross-Connect System ("DCS") functionality as an option in the same manner provided to IXCs that purchase transport services. DCS is described below in Section 7.5 of this Attachment.

### 7.2 Technical Requirements

This Section sets forth technical requirements for all Dedicated Transport.

MCIm Order, p. 8 at Issue 9C and AT&T Order, p. 12 at Issue 22.

- 7.2.1 When U S WEST provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS-1, DS-3, STS-1) shall be dedicated to AT&T designated traffic.
- 7.2.2 U S WEST shall offer Dedicated Transport using currently available technologies including, but not limited to, DS-1 and DS-3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.
- 7.2.3 When requested by AT&T, Dedicated Transport shall provide physical diversity. Physical diversity means that two (2) circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 7.2.4 When physical diversity is requested by AT&T, USWEST shall provide the maximum feasible physical separation between transmission paths for all facilities and equipment unless otherwise agreed to by AT&T.
- 7.2.5 Upon AT&T's written request and where available in the USWEST network, USWEST shall provide real time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, AT&T's traffic.
- 7.2.6 U S WEST shall offer the following interface transmission rates for Dedicated Transport:
  - 7.2.6.1 DS-1 (Extended SuperFrame ESF/B8ZS, D4, and unframed applications shall be provided, except for those local/EAS tandems as designated by U S WEST);
  - 7.2.6.2 DS-3 (C-bit Parity, M13, and unframed applications shall be provided);
  - 7.2.6.3 SONET standard interface rates in accordance with ANSI T1.105 and ANSI T1.105.07 and physical interfaces per ANSI T1.106.06, including referenced interfaces. In particular, VT1.5 based STS-1s will be the interface at an AT&T service node; and
  - 7.2.6.4 where available, SONET standard interface rates in accordance with International Telecommunications Union ("ITU") Recommendation G.707 and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.
- 7.2.7 U S WEST shall provide intraoffice wiring up to a suitable Point of Termination ("POT") between Dedicated Transport and AT&T designated equipment.
  U S WEST shall provide the following equipment for the physical POT:
  - 7.2.7.1 DSX1 or DCS for DS-1s or VT1.5s;
  - 7.2.7.2 DSX3 or DCS for DS-3s or STS-1s; and
  - 7.2.7.3 Light guide cross-connect for optical signals (e.g., OC-3 and OC-12).

- 7.2.8 For Dedicated Transport provided as a system, U S WEST shall design the system, including, but not limited to, facility routing and termination points, according to AT&T specifications.
- 7.2.9 Upon AT&T's request and where available, USWEST shall provide AT&T with electronic provisioning control, of AT&T specified Dedicated Transport via Command-A-Link or equivalent interface in the same manner as is provided to IXCs.
- 7.2.10 US WEST shall offer Dedicated Transport together with and separately from DCS.
- 7.3 Technical Requirements for Dedicated Transport Using SONET Technology.

This Section sets forth additional technical requirements for Dedicated Transport using SONET technology including rings, point-to-point systems, and linear add-drop systems.

- 7.3.1 All SONET Dedicated Transport provided as a system shall:
  - 7.3.1.1 be synchronized with a primary Stratum 1 level timing source;
  - 7.3.1.2 provide SONET standard interfaces as available in the U S WEST network and consistent with generally accepted industry standards which properly interwork with SONET standard equipment from other vendors, including, but not limited to, SONET standard section, line and path performance monitoring, maintenance signals, alarms, and data channels;
  - 7.3.1.3 provide Data Communications Channel ("DCC") or equivalent connectivity through the SONET transport system. Dedicated Transport provided over a SONET transport system shall be capable of routing DCC messages between AT&T and SONET network components connected to the Dedicated Transport. For example, if AT&T leases a SONET ring from U S WEST, that ring shall support DCC message routing between AT&T and SONET network components connected to the ring; and
  - 7.3.1.4 support the following performance requirements for each circuit (STS-1, DS-1, DS-3, etc.):
    - 7.3.1.4.1 no more than ten (10) Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 7.4.5); and
    - 7.3.1.4.2 no more than one (1) Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 7.4.5).
- 7.3.2 SONET rings shall:
  - 7.3.2.1 be provisioned on physically diverse fiber optic cables (including separate building entrances where available). "Diversely routed" shall be interpreted as the maximum feasible physical separation between transmission paths, unless otherwise agreed to by AT&T;

- 7.3.2.2 support dual ring interworking per SONET Standards where available in the U S WEST network;
- 7.3.2.3 provide the necessary redundancy in optics, electronics, and transmission paths such that no single failure will cause a service interruption;
- 7.3.2.4 where available, provide the ability to disable ring protection switching at AT&T's direction (selective protection lock-out). This requirement applies to line switched rings only;
- 7.3.2.5 where available, provide the ability to use the protection channels to carry extra traffic. This requirement applies to line switched rings only;
- 7.3.2.6 provide 50 millisecond restoration as defined in SONET standards;
- 7.3.2.7 where available, have settable ring protection switching thresholds that shall be set in accordance with AT&T's specifications;
- 7.3.2.8 where available, provide revertive protection switching with a settable wait to restore delay with a default setting of five (5) minutes. This requirement applies to line switched rings only;
- 7.3.2.9 provide non-revertive protection switching. This requirement applies to path switched rings only, and
- 7.3.2.10 adhere to the following availability requirements, where availability is defined in the technical reference set forth in Section 7.4.5:
  - 7.3.2.10.1 no more than 0.25 minutes of unavailability per month; and
  - 7.3.2.10.2 no more than 0.5 minutes of unavailability per year.
- 7.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a minimum, Dedicated Transport shall meet each of the requirements set forth in Section 7.2.3 of this Attachment and in the following technical references:
  - 7.4.1 ANSI T1.105.04-1995, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures;
  - 7.4.2 ANSI T1.119-1994, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications;
  - 7.4.3 ANSI T1.119.01-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment;
  - 7.4.4 ANSI T1.119.02-199x, American National Standard for Telecommunications Synchronous Optical Network (SONET) Operations, Administration, Maintenance,

and Provisioning (OAM&P) Communications Performance Monitoring Fragment; and

7.4.5 ANSI T1.231-1993 -American National Standard for Telecommunications - Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring.

#### 7.5 Digital Cross-Connect System

#### 7.5.1 Definition

- 7.5.1.1 Digital Cross-Connect System ("DCS") is a function which provides automated cross connection of Digital Signal level 0 (DS-0) or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include, but are not limited to, DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS-1 rate or greater with cross-connection typically at the DS-0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1) or other Synchronous Optical Network (SONET) signals (e.g., STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (e.g., DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.
- 7.5.1.2 In locations where automated cross connection capability does not exist, a Digital Signal Cross-Connect ("DSX") or light guide cross-connect patch panels and D4 channel banks or other DS-0 and above multiplexing equipment used to provide the function of a manual cross connection will be made available.
- 7.5.1.3 Interconnection between a DSX or light guide cross-connect, to a switch, another cross-connect, or other service platform device, is included as part of DCS.

### 7.6 DCS Technical Requirements

- 7.6.1 DCS shall provide completed end-to-end cross connection of the channels designated by AT&T.
- 7.6.2 DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast, and facility test functions, where technically feasible.
- 7.6.3 DCS shall provide multiplexing, format conversion, signaling conversion, or other functions, where technically feasible.
- 7.6.4 The end-to-end cross connection shall be input to the underlying device used to provide DCS from an operator at a terminal or via an intermediate system. The cross connection assignment shall remain in effect whether or not the circuit is in use.
- 7.6.5 U S WEST shall administer and maintain DCS.

- 7.6.6 Where available, U S WEST shall provide various types of DCSs, including:
  - 7.6.6.1 DS-0 cross-connects (typically termed DCS 1/0);
  - 7.6.6.2 DS1/VT1.5 (Virtual Tributaries at the 1.5Mbps rate) cross-connects (typically termed DCS 3/1);
  - 7.6.6.3 DS-3 cross-connects (typically termed DCS 3/3);
  - 7.6.6.4 STS-1 cross-connects; and
  - 7.6.6.5 other technically feasible cross-connects designated by AT&T.
- 7.6.7 US WEST shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (i.e., US WEST shall establish the processes to implement cross connects on demand), where available, based on engineering forecasts.
- 7.6.8 USWEST shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., USWEST shall establish the processes to implement cross connects on the schedule designated by AT&T) or, at AT&T's option, permit AT&T to control such configurations and reconfigurations, where available, based on engineering forecasts.
- 7.6.9 DCS shall continuously monitor protected circuit packs and redundant common equipment.
- 7.6.10 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 7.6.11 DCS equipment shall be equipped with a redundant power supply or a battery backup.
- 7.6.12 U S WEST shall have available and utilize spare maintenance facilities and equipment necessary for provisioning repairs.
- 7.6.13 At AT&T's option, U S WEST shall provide, where available, AT&T with real time performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact AT&T's services. For example, this may include hardware alarm data and facility alarm data on a DS-3 in which an AT&T DS-1 is traversing.
- 7.6.14 At AT&T's option, US WEST shall provide AT&T with real time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation where available.
- 7.6.15 Where available, DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS-1 or STS-1 to DS-3).

- 7.6.16 Where available, DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (e.g., Optical Carrier level 3, i.e., OC-3, interfaces on a DCS 3/1).
- 7.6.17 Where available, DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring.
- 7.6.18 DCS shall provide multipoint bridging of multiple channels to other DCSs. AT&T may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries.
- 7.6.19 DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by AT&T.

### 7.7 DCS Interface Requirements

- 7.7.1 U S WEST shall provide physical interfaces on DS-0, DS-1, and VT1.5 channel cross-connect devices at the DS-1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and AT&T standards.
- 7.7.2 USWEST shall provide physical interfaces on DS-3 channel cross-connect devices at the DS-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and AT&T standards.
- 7.7.3 U S WEST shall provide physical interfaces on STS-1 cross-connect devices at the OC-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and AT&T standards.
- 7.7.4 Interfaces on all other cross-connect devices shall be in compliance with applicable Bellcore, ANSI, ITU, and AT&T standards.
- 7.8 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, DCS shall, at a minimum, meet all the requirements set forth in the following technical references:
  - 7.8.1 ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy - Electrical Interfaces;
  - 7.8.2 ANSI T1.102.01-199x, American National Standard for Telecommunications Digital Hierarchy VT1.5;
  - 7.8.3 ANSI T1.105-1995, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
  - 7.8.4 ANSI T1.105.03-1994, American National Standard for Telecommunications Synchronous Optical Network (SONET) Jitter at Network Interfaces;

- 7.8.5 ANSI T1.105.03a-1995, American National Standard for Telecommunications -Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS-1 Supplement;
- 7.8.6 ANSI T1.105.06-199x, American National Standard for Telecommunications -Synchronous Optical Network (SONET) - Physical Layer Specifications;
- 7.8.7 ANSI T1.106-1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode);
- 7.8.8 ANSI T1.107-1988, American National Standard for Telecommunications Digital Hierarchy Formats Specifications;
- 7.8.9 ANSI T1.107a-1990, American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications (DS-3 Format Applications);
- 7.8.10 ANSI T1.107b-1991, American National Standard for Telecommunications Digital Hierarchy Supplement to Formats Specifications;
- 7.8.11 ANSI T1.117-1991, American National Standard for Telecommunications Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 7.8.12 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
- 7.8.13 ANSI T1.404-1994, Network-to-Subscriber Installation DS-3 Metallic Interface Specification;
- 7.8.14 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 7.8.15 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 7.8.16 FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 7.8.17 GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;
- 7.8.18 GR-253-CORE, Synchronous Optical Network Systems (SONET): Common Generic Criteria; and
- 7.8.19 TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

#### 8. Loop

#### 8.1 Definition

8.1.1 A Loop is a transmission facility between a distribution frame, or its equivalent, in a USWEST central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which AT&T are granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

- Loop Concentrator/Multiplexer
- Loop Feeder
- Network Interface Device (NID)
- Distribution
- 8.1.1.1<sup>6</sup> AT&T may purchase Loop and NID on an unbundled basis. AT&T shall use the Bona Fide Request process set forth in Part A of this Agreement to request unbundling of Loop Concentrator/Multiplexer, Loop Feeder and Distribution.
- 8.1.2 If U S WEST uses Integrated Digital Loop Carrier ("DLCs") systems to provide the local Loop, U S WEST will make alternate arrangements, equal in quality, to permit AT&T to order a contiguous unbundled local Loop. These arrangements may, at U S WEST's option, include the following: providing AT&T with copper facilities or universal DLC that meet established technical parameters, deploying Virtual Remote Terminals, allowing AT&T to purchase the entire Integrated DLC, or converting integrated DLCs to non-integrated systems.
- 8.1.3 U S WEST shall provide the BRI U interface using 2-wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 8.2 Technical Requirements

Subdivided to each component as detailed below.

8.3 Interface Requirements

Subdivided to each component as detailed below.

- 8.4 Loop Components
  - 8.4.1 Loop Concentrator/Multiplexer
    - 8.4.1.1 Definition:
      - 8.4.1.1.1 The Loop Concentrator/Multiplexer is the Network Element that:

(a) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (b) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing); (c) aggregates a specified number of signals or channels to fewer channels (concentrating); (d) performs signal conversion, including encoding of signals (e.g., analog to digital and

MCIm Order, p. 7 at Issue 9(a).

digital to analog signal conversion); and (e) in some instances performs electrical to optical (E/O) conversion.

8.4.1.1.2 The Loop Concentrator/Multiplexer function may be provided through a DLC system, channel bank, multiplexer or other equipment at which traffic is encoded and decoded, multiplexed and demultiplexed, or concentrated.

### 8.4.1.2 Technical Requirements

- 8.4.1.2.1 The Loop Concentrator/Multiplexer shall be capable of performing its functions on the signals for the following services, as needed by AT&T to provide end-to-end service capability to its subscriber, including, but not limited to:
  - 8.4.1.2.1.1 two-wire & four-wire analog voice grade loops;
  - 8.4.1.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services;
  - 8.4.1.2.1.3 4-wire digital data (2.4Kbps through 64Kbps and "n" times 64Kbps (where n < 24);
  - 8.4.1.2.1.4 DS-3 rate private lines where available; and
  - 8.4.1.2.1.5 Optical SONET rate private lines where available.
- 8.4.1.2.2 The Loop Concentrator/Multiplexer shall perform the following functions as appropriate:
  - 8.4.1.2.2.1 analog to digital signal conversion of both incoming and outgoing (upstream and downstream) analog signals;
  - 8.4.1.2.2.2 multiplexing of the individual digital signals up to higher transmission bit rate signals (e.g., DS-0, DS-1, DS-3, or optical SONET rates) for transport to the US WEST central office through the Loop Feeder; and
  - 8.4.1.2.2.3 concentration of end-user subscriber signals onto fewer channels of a Loop Feeder (when available the concentration ratio shall be as specified from time to time by AT&T).
  - 8.4.1.2.2.4 Concentration ratios shall not impair analog or digital performance.
- 8.4.1.2.3. AT&T may request U S WEST to provide power for the Loop Concentrator/Multiplexer through a non-interruptible source, if the function is performed in a central office, or from a commercial AC power source with

battery backup, if the equipment is located outside a central office. Such power shall also adhere to the requirements stated herein.

- 8.4.1.2.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, the Loop Concentrator/Multiplexer shall be provided to AT&T in accordance with the following Technical References:
  - 8.4.1.2.4.1 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993;
  - 8.4.1.2.4.2 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines;
  - 8.4.1.2.4.3 T1.106 1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode);
  - 8.4.1.2.4.4 ANSI T1.105-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats;
  - 8.4.1.2.4.5 ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces;
  - 8.4.1.2.4.6 ANSI T1.403-1989, American National Standard for Telecommunications Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
  - 8.4.1.2.4.7 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria;
  - 8.4.1.2.4.8 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987;
  - 8.4.1.2.4.9 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev. 1, December 1993; Supplement 1, December 1993;
  - 8.4.1.2.4.10 Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System, (LSSGR) FSD 20-02-2100, Issue 1, September 1989; and
  - 8.4.1.2.4.11 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

#### 8.4.1.3 Requirements for an Intelligent Loop Concentrator/ Multiplexer:

- 8.4.1.3.1 In addition to the basic functions described above for the Loop Concentrator/Multiplexer, the Intelligent Loop Concentrator/Multiplexer ("IC/M") shall provide facility grooming, facility test functions, format conversion and signaling conversion, as appropriate.
- 8.4.1.3.2 The underlying equipment that provides such IC/M function shall continuously monitor protected circuit packs and redundant common equipment.
- 8.4.1.3.3 The underlying equipment that provides such IC/M function shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 8.4.1.3.4 The underlying equipment that provides such IC/M function shall be equipped with a redundant power supply or a battery back-up.
- 8.4.1.3.5 AT&T may request USWEST to provide AT&T with real time performance monitoring and alarm data on IC/M elements that may affect AT&T's traffic. This includes IC/M hardware alarm data and facility alarm data on the underlying device that provides such IC/M function.
- 8.4.1.3.6 AT&T may request U S WEST to provide AT&T with real time ability to initiate tests on the underlying device that provides such IC/M function integrated test equipment as well as other integrated functionality for routine testing and fault isolation.

### 8.4.1.4 Interface Requirements

- 8.4.1.4.1 The Loop Concentrator/Multiplexer shall meet the following interface requirements, as appropriate for the configuration that AT&T designates:
- 8.4.1.4.2 The Loop Concentrator/Multiplexer shall provide an analog voice frequency copper twisted pair interface at the serving wire center.
- 8.4.1.4.3 The Loop Concentrator/Multiplexer shall provide digital 4-wire electrical interfaces at the serving wire center.
- 8.4.1.4.4 The Loop Concentrator/Multiplexer shall provide optical SONET interfaces at rates of O1.C-3, OC-12, OC-48, and OC-N.
- 8.4.1.4.5 The Loop Concentrator/Multiplexer shall provide the Bellcore TR-303 DS-1 level interface at the serving wire center. Loop Concentrator/ Multiplexer shall provide Bellcore TR-08 modes 1&2 DS1 interfaces when designated by AT&T.

8.4.1.4.6 The Intelligent Loop Concentrator/Multiplexer shall be provided to AT&T in accordance with the Technical References set forth in Sections 8.4.1.2.4.8 through 8.4.1.2.4.11, above.

#### 8.4.2 Loop Feeder

#### 8.4.2.1 Definition:

- 8.4.2.1.1 The Loop Feeder is the Network Element that provides connectivity between (a) a Feeder Distribution Interface (FDI) associated with Loop Distribution and a termination point appropriate for the media in a central office, or (b) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office.
- 8.4.2.1.2 Pursuant to a Bona Fide Request for unbundled feeder or distribution, U S WEST shall provide AT&T physical access to the FDI and the right to connect the Loop Feeder to the FDI.
- 8.4.2.1.3<sup>7</sup> Upon request from AT&T regarding a specific area, USWEST shall provide information on Feeder Distribution Interface (FDI) within a reasonable time. If such information is available as part of USWEST's operations support system, it must be made available to AT&T on the same terms and conditions as it is available to USWEST. USWEST need not provide information which is already publicly available.
- 8.4.2.1.4 The physical medium of the Loop Feeder may be copper twisted pair, or single or multi-mode fiber or other technologies as designated by AT&T. In certain cases, AT&T will require a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that USWEST offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

### 8.4.2.2 Requirements for Loop Feeder

- 8.4.2.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data, or, where available in the network, analog radio frequency signals, as appropriate.
- 8.4.2.2.2 U S WEST shall provide appropriate power for all active elements in the Loop Feeder. U S WEST will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant Remote Terminal ("RT").

MCIm Order, p. 24 at Issue 42.

8.4.2.3 Additional Requirements for Special Copper Loop Feeder Medium

In addition to the requirements set forth above, AT&T may require U S WEST to provide copper twisted pair Loop Feeder unfettered by any intervening equipment (e.g., filters, load coils, and range extenders), so that AT&T can use these Loop Feeders for a variety of services by attaching appropriate terminal equipment at the ends.

8.4.2.4 Additional Technical Requirements for DS-1 Conditioned Loop Feeder

In addition to the requirements set forth above, AT&T may designate that the Loop Feeder be conditioned to transport a DS-1 signal. The requirements for such transport are defined in the references below in Section 8.4.2.6.

8.4.2.5 Additional Technical Requirements for Optical Loop Feeder

In addition to the requirements set forth above, AT&T may designate that Loop Feeder will transport DS-3 and OC-n (where "n" is defined in the technical reference in Section 8.4.1.2.4.4). The requirements for such transport are defined in the references below in Section 8.4.2.6.

- 8.4.2.6 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, USWEST shall offer Loop Feeder in compliance with the requirements set forth in the following Technical References:
  - 8.4.2.6.1 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS-1 interfaces;
  - 8.4.2.6.2 Bellcore TR-NWT-00057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993:
  - 8.4.2.6.3 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines;
  - 8.4.2.6.4 ANSI T1.106-1988, American National Standard for Telecommunications Digital Hierarchy Optical Interface Specifications (Single Mode);
  - 8.4.2.6.5 ANSI T1.105-1995, American National Standard for Telecommunications Synchronous Optical Network (SONET) Basic Description including Multiplex Structure, Rates and Formats;
  - 8.4.2.6.6 ANSI T1.102-1993, American National Standard for Telecommunications Digital Hierarchy Electrical Interfaces;
  - 8.4.2.6.7 ANSI T1.403-1989, American National Standard for Telecommunications Carrier to Subscriber Installation, DS-1 Metallic Interface Specification; and
  - 8.4.2.6.8 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.

#### 8.4.2.7 Interface Requirements

- 8.4.2.7.1 The Loop Feeder point of termination ("POT") within a U S WEST central office will be as follows:
  - 8.4.2.7.1.1 Copper twisted pairs shall terminate on the MDF;
  - 8.4.2.7.1.2 DS-1 Loop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and
  - 8.4.2.7.1.3 Fiber optic cable shall terminate on a light guide termination panel or equivalent.
- 8.4.2.7.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, Loop Feeder shall be equal to or better than each of the applicable interface requirements set forth in the following technical references:
  - 8.4.2.7.2.1 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987;
  - 8.4.2.7.2.2 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev. 1, December 1993; Supplement 1, December 1993; and
  - 8.4.2.7.2.3 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

# 9. Distribution

#### 9.1 Definition:

- 9.1.1 Distribution provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of an FDI. The FDI is a device that terminates the Distribution Media and the Loop Feeder, and cross-connects them in order to provide a continuous transmission path between the NID and a telephone company central office. There are three (3) basic types of feeder-distribution connections: (a) multiple (splicing of multiple distribution pairs onto one (1) feeder pair); (b) dedicated ("home run"); and (c) interfaced ("cross-connected"). While older plant uses multiple and dedicated methods, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced connection method. The feeder-distribution interface ("FDI") in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.
- 9.1.2 The Distribution may be copper twisted pair, coax cable, single or multi-mode fiber optic cable or other technologies. A combination that includes two (2) or more of

these media is also possible. In certain cases, AT&T shall require a copper twisted pair Distribution even in instances where the Distribution for services that U S WEST offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

#### 9.2 Requirements for All Distribution

- 9.2.1 Distribution shall be capable of transmitting signals for the following services, as requested by AT&T:
  - 9.2.1.1 two-wire & four-wire analog voice grade loops; and
  - 9.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services.
- 9.2.2 Distribution shall transmit all signaling messages or tones. Where the Distribution includes any active elements that terminate any of the signaling messages or tones, these messages or tones shall be reproduced by the Distribution at the interfaces to an adjacent Network Element in a format that maintains the integrity of the signaling messages or tones.
- 9.2.3 U S WEST shall not interfere with AT&T's ability to support functions associated with provisioning, maintenance, performance monitoring and testing of the unbundled Distribution.
- 9.2.4 Distribution shall be equal to or better than all of the applicable requirements set forth in the following technical references:
  - 9.2.4.1 Bellcore TR-TSY-000057, "Functional Criteria for Digital Loop Carrier Systems"; and
  - 9.2.4.2 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines".
- 9.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements set forth in Section 9.2. above, AT&T may designate Distribution to be copper twisted pair unfettered by any intervening equipment (e.g., filters, load coils, range extenders) so that AT&T can use these loops for a variety of services by attaching appropriate terminal equipment at the ends.

#### 9.4 Additional Requirements for Fiber Distribution

Fiber optic cable Distribution shall be capable of transmitting signals for the following services in addition to the those set forth in Section 9.2.1 above:

- 9.4.1 DS-3 rate private line service;
- 9.4.2 Optical SONET OC-n rate private lines (where "n" is defined in the technical reference in Section 8.4.1.2.4.4); and

9.4.3 Where available in the USWEST network, Analog Radio Frequency based services (e.g., Cable Television (CATV)).

# 9.5 Additional Requirements for Coaxial Cable Distribution

Where available in the U S WEST network, coaxial cable (coax) Distribution shall be capable of transmitting signals for the following services in addition to those set forth in Section 9.2.1 above:

- 9.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mb/s and 45 Mb/s; and
- 9.5.2 Analog Radio Frequency based services (e.g., CATV).

#### 9.6 Interface Requirements

- 9.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the performance requirements set forth in Section 18.2 of this Attachment.
- 9.6.2 Distribution shall be at least equal to each of the applicable interface requirements set forth in the following technical references:
  - 9.6.2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices", issued December 1, 1994;
  - 9.6.2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems", issued January 2, 1993;
  - 9.6.2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines"; and
  - 9.6.2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991.

## 10. Local Switching

#### 10.1 Definition:

10.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the Main Distributing Frame ("MDF") or Digital Cross Connect ("DSX") panel to a desired line or trunk. The desired connection path for each call type will vary by subscriber and will be specified by AT&T as a routing scenario that will be implemented in advance as part of or after the purchase of the unbundled Local Switching. Such functionality shall include all of the features, functions, and capabilities that the underlying U S WEST local switch is capable of providing<sup>8</sup>, including, but not limited to: line signaling and signaling software, digit reception, dialed number translations,

MCIm Order, p. 25 and AT&T Order at Issue 18.

call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, announcements, calling features and capabilities (including call processing), Centrex, or Centrex-like services, Automatic Call Distributor ("ACD"), Carrier pre-subscription (e.g., long distance carrier, intraLATA toll), Carrier Identification Code ("CIC"), number portability capabilities, testing and other operational features inherent to the switch and switch software. The Local Switching function also provides access to transport, signaling (ISDN User Part ("ISUP") and Transaction Capabilities Application Part ("TCAP"), and platforms such as adjuncts, Public Safety Systems (911), Operator Services, Directory Assistance Services and Advanced Intelligent Network ("AIN"). Remote Switching Module functionality is included in the Local Switching function. Local Switching shall also be capable of routing local, intraLATA, interLATA, and international calls to the subscriber's preferred carrier, call features (e.g., call forwarding) and Centrex capabilities.

10.1.2 Local Switching, including the ability to route to AT&T's transport facilities, dedicated facilities and systems, shall be unbundled from all other unbundled Network Elements, i.e., Operator Systems, Common Transport, Shared Transport and Dedicated Transport.

#### 10.2 Technical Requirements

- 10.2.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in Bellcore's Local Switching Systems General Requirements FR-NWT-000064.
  - 10.2.1.1 U S WEST shall route calls to the appropriate trunk or lines for call origination or termination.
  - 10.2.1.2U S WEST shall route calls on a per line or per screening class basis to (a) U S WEST platforms providing Network Elements or additional requirements, (b) AT&T designated platforms, or (c) third-party platforms.
  - 10.2.1.3U S WEST shall provide to AT&T recorded announcements as furnished by AT&T and call progress tones to alert callers of call progress and disposition. The installation cost shall be borne by AT&T for such announcements and call progress tones to the extent they are different than those standardly used by U S WEST.
  - 10.2.1.4U S WEST shall change a subscriber from U S WEST's services to AT&T's services without loss of feature functionality, unless designated otherwise by AT&T.
  - 10.2.1.5U S WEST shall perform routine testing (e.g., Mechanized Loop Tests ("MLT") and test calls such as 105, 107 and 108 type calls) and fault isolation on AT&T's unbundled Network Elements, as designated by AT&T.

- 10.2.1.6U S WEST shall repair and restore any equipment or any other maintainable component that may adversely impact AT&T's use of unbundled Local Switching.
- 10.2.1.7U S WEST shall control congestion points such as mass calling events and network routing abnormalities using capabilities such as Automatic Call Gapping, Automatic Congestion Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or U S WEST.
- 10.2.1.8 U S WEST shall perform manual call trace as designated by AT&T and shall permit subscriber originated call trace.
- 10.2.1.9 U S WEST shall record all billable events, involving usage of the Network Element, and send the appropriate recording data to AT&T as further described in Attachment 5.
- 10.2.1.10 For Local Switching used as E911 tandems, USWEST shall allow interconnection with AT&T switches in that same local switch used as a E911 tandem and shall route calls to the appropriate Public Safety Access Point (PSAP). In the event the Local Switching element and the E911 tandem are contained within the same USWEST switch, such trunking shall be provided on an intra-switch basis.
- 10.2.1.11 Where USWEST provides the following special services, it shall provide to AT&T:
  - 10.2.1.11.1 essential Service Lines;
  - 10.2.1.11.2 Telephone Service Prioritization ("TSP");
  - 10.2.1.11.3 related services for handicapped;
  - 10.2.1.11.4 where USWEST provides soft dial tone, it shall do so on a competitively-neutral basis; and
  - 10.2.1.11.5 any other service required by law or regulation.
- 10.2.1.12 U S WEST shall provide Switching Service Point ("SSP") capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch ("STP"). In the event Local Switching is provided out of a switch without SS7 capability, the Tandem shall provide this capability as further described in Section 4\_ of this Attachment. These capabilities shall adhere to Bellcore specifications TCAP (GR-1432-CORE), ISUP (GR-905-CORE), Call Management (GR-1429-CORE), Switched Fractional DS1 (GR-1357-CORE), Toll Free Service (GR-1428-CORE), Calling Name (GR-1597-CORE), Line Information Database (GR-954-CORE), and Advanced Intelligent Network (GR-2863-CORE).

- 10.2.1.13 U S WEST shall provide interfaces to adjuncts through industry standard and Bellcore interfaces. These adjuncts may include, but are not limited to, Service Node, Service Circuit Node, Voice Mail and Automatic Call Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.
- 10.2.1.14 Upon AT&T's request, USWEST shall provide performance data regarding a subscriber line, traffic characteristics or other measurable elements to AT&T.
- 10.2.1.15 U S WEST shall offer all technically feasible Local Switching features, and, in providing such features, do so at parity with those provided by U S WEST to itself or any other Person.
  - 10.2.1.15.1 Such feature offerings shall include, but are not limited to:

Basic and primary rate ISDN; Residential features; Custom Local Area Signaling Services (CLASS/LASS); Custom Calling Features; and Centrex (including equivalent administrative capabilities, such as subscriber accessible reconfiguration and detailed message recording).

10.2.1.15.2 AT&T may use the Bona Fide Request process set forth in Part A of this Agreement to request unbundling of Advanced Intelligent Network ("AIN") triggers supporting AT&T and USWEST service applications in USWEST's SCPs. USWEST shall offer AIN-based services in accordance with applicable technical references. Such services may include, but are not limited to:

10.2.1.15.2.1 Off-Hook Immediate;

10.2.1.15.2.2 Off-Hook Delay;

10.2.1.15.2.3 Private EAMF Trunk;

10.2.1.15.2.4 Shared Interoffice Trunk (EAMF, SS7);

10.2.1.15.2.5 Termination Attempt;

10.2.1.15.2.6 3/6/10;

10.2.1.15.2.7 N11;

MCIm Order, p. 7 at Issue 9(b) and AT&T Order Issue 19. The Order states that AIN triggers must be unbundled when technically feasible without harm to the network. The BFR process incorporates this standard, so the following changes rely on that process to address future AIN trigger unbundling.

10.2.1.15.2.8 Feature Code Dialing;

10.2.1.15.2.9 Custom Dialing Plan(s), including 555 services; and

10.2.1.15.2.10 Automatic Route Selection.

10.2.1.16 U S WEST shall assign each AT&T subscriber line the class of service designated by AT&T (e.g., using line class codes or other switch specific provisioning methods), and at AT&T's option shall route Directory Assistance calls from AT&T subscribers as directed by AT&T. This includes each of the following call types:

10.2.1.16.1	0+/0- calls;
10.2.1.16.2	911 calls;
10.2.1.16.3	411/DA calls;
10.2.1.16.4	InterLATA calls specific to PIC or regardless of PIC;
10.2.1.16.5	IntraLATA calls specific to PIC or regardless of PIC;
10.2.1.16.6	Toll free calls, prior to database query;
10.2.1.16.7	Call forwarding of any type supported on the switch, to a line or a trunk; and
10.2.1.16.8	Any other customized routing that may be supported by the U S WEST switch.

- 10.2.1.17 U S WEST shall assign each AT&T subscriber line the class of service designated by AT&T (e.g., using line class codes or other switch specific provisioning methods) and shall route operator calls from AT&T subscribers as directed by AT&T at AT&T's option. For example, U S WEST may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to an AT&T Operator Services Position System ("OSPS"). Calls from Local Switching must pass the ANI-II digits unchanged.
- 10.2.1.18 If an AT&T customer subscribes to AT&T provided voice mail and messaging services, USWEST shall redirect incoming calls to the AT&T system based upon designated service arrangements (e.g., busy, don't answer, number of rings). In addition, USWEST shall provide a Standard Message Desk Interface-Enhanced (SMDI-E) interface to the AT&T system. USWEST shall support the Interswitch Voice Messaging Service (IVMS) capability.
- 10.2.1.19 Local Switching shall be offered in accordance with the requirements of the following technical references and their future releases:

10.2.1.19.1 GR-1298-CORE, AIN Switching System Generic Requirements;

10.2.1.19.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements;

10.2.1.19.3 TR-NWT-001284, AlN 0.1 Switching System Generic Requirements; and

10.2.1.19.4 SR-NWT-002247, AIN Release 1 Update.

# 10.2.2 Interface Requirements:

- 10.2.2.1 U S WEST shall provide the following interfaces to Loops:
  - 10.2.2.1.1 Standard Tip/Ring interface, including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);
  - 10.2.2.1.2 Coin phone signaling capability; 10
  - 10.2.2.1.3 Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
  - 10.2.2.1.4 Two-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;
  - 10.2.2.1.5 Four-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;
  - 10.2.2.1.6 Four-wire DS-1 interface to PBX or subscriber provided equipment (e.g., computers and voice response systems);
  - 10.2.2.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;
  - 10.2.2.1.8 Switched Fractional DS-1 with capabilities to configure Nx64 channels (where "n" = 1 to 24); and
  - 10.2.2.1.9 Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 10.2.2.2 U S WEST shall provide access to the following, but not limited to:
  - 10.2.2.2.1 SS7 Signaling Network or Multi-Frequency trunking, if requested by AT&T;

Procedural Order, July 14, 1997, at pages 17-18.

- 10.2.2.2.2 Interface to AT&T operator services systems or Operator Services through appropriate trunk interconnections for the system; and
- 10.2.2.2.3 Interface to AT&T Directory Assistance Services through the AT&T switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other AT&T required access to interexchange carriers as requested through appropriate trunk interfaces.

# 10.3 Customized Routing

# 10.3.1 Description

Customized routing will enable AT&T to direct particular classes of calls to particular outgoing trunks based upon line class codes. AT&T may use customized routing to direct its customers' calls to 411, 555-1212, 0+ or 0-, to its own Operator Services platform and Directory Assistance platform.

#### 10.3.2 Limitations

Because there is a limitation in the technical feasibility of offering custom routing beyond the capacity of the 1A ESS switch, custom routing will be offered to CLECs on a first-come, first-served basis.

### 10.4 Integrated Services Digital Network (ISDN)

- 10.4.1 Integrated Services Digital Network ("ISDN") is defined in two (2) variations. The first variation is Basic Rate ISDN ("BRI"). BRI consists of 2 Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN ("PRI"). PRI consists of 23 B Channels and one D Channel. Both BRI and PRI B Channels may be used for voice, Circuit Switched Data ("CSD") or Packet Switched Data ("PSD"). The BRI D Channel may be used for call related signaling or packet switched data. The PRI D Channel may be used for call related signaling.
- 10.4.2 Technical Requirements ISDN
  - 10.4.2.1 U S WEST shall offer Data Switching providing ISDN that, at a minimum:
  - 10.4.2.2 provides integrated Packet handling capabilities;
  - 10.4.2.3 allows for full 2B+D Channel functionality for BRI; and
  - 10.4.2.4 allows for full 23B+D Channel functionality for PRI.
  - 10.4.2.5 Each B Channel shall allow for voice, 64 Kbps CSD, and PSD of 128 logical channels at minimum speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B Channel.
  - 10.4.2.6 Each B Channel shall provide capabilities for alternate voice and data on a per call basis.

10.4.2.7The BRI D Channel shall allow for call associated signaling, non-call associated signaling and PSD of 16 logical channels at minimum speeds of 9.6 Kbps throughput of each logical channel up to the total capacity of the D channel.

10.4.2.8 The PRI D Channel shall allow for call associated signaling.

## 10.4.3 Interface Requirements --- ISDN

- 10.4.3.1 U S WEST shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 Specifications to Interconnect Digital Loop Carriers.
- 10.4.3.2U S WEST shall offer PSD interfaces adhering to the X.25, X.75 and X.75 ANSI and Bellcore requirements.
- 10.4.3.3 US WEST shall offer PSD trunk interfaces operating at 56 Kbps.

## 11. Network Interface Device

### 11.1 Definition:

- 11.1.1 The Network Interface Device ("NID") is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit. One of the functions of the NID is to establish the network demarcation point between a carrier and its subscriber. The NID features two (2) independent chambers or divisions which separate the service provider's network from the subscriber's inside wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider and the subscriber each make their connections.
- 11.1.2 AT&T may connect its NID to U S WEST's NID.
- 11.1.3 U S WEST will allow AT&T to locate dropwires, other than U S WEST's drop wires, inside an existing U S WEST combination NID used in the provisioning of telephone service for single tenant end users subject to the following conditions:
  - 11.1.3.1 Sufficient space exists inside the combination NID to allow proper installation of equipment in accordance with the NID manufacturers specifications and per the National Electric Code;
  - 11.1.3.2 In order to maintain maintenance integrity for the NID, AT&T will install its own overvoltage protection and customer bridging equipment, terminate the dropwires to that equipment, and assume all operational responsibilities and liabilities for that equipment;

In the event sufficient space is not available in the existing USWEST NID, to accommodate additional drops, AT&T will be allowed to install and additional NID, at its own expense and the AT&T's NID can be connected to the existing USWEST NID;

If the existing NID is not the new generation modular type, AT&T may install a new NID. U S WEST will be allowed to move its drop wire to the new NID and remove the old NID:

Within ninety (90) days of the Effective Date of this Agreement, the Parties agree to jointly develop a satisfactory process to address the issues with access to single and multi-party NIDs.

11.1.4 With respect to multiple-line termination devices, AT&T shall specify the quantity of NIDs it requires within such device.

# 11.2 Technical Requirements

- 11.2.1 The NID shall provide a clean, accessible point of connection for the inside wiring and for the Distribution Media and/or cross connect to AT&T's NID and shall maintain a connection to ground meeting the requirements as set forth below.
- 11.2.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to AT&T's NID.
- 11.2.3 All NID posts or connecting points shall be in place, secure, usable and free of any rust or corrosion. The protective ground connection shall exist and be properly installed. The ground wire shall be free of rust and corrosion and have continuity to ground.
- 11.2.4 The NID shall be capable of withstanding all normal local environmental variations.
- 11.2.5 Where the NID is not located in a larger, secure cabinet or closet, the NID shall be protected from vandalism. The NID shall be accessible to AT&T designated personnel. In cases where entrance to the subscriber premises is required to give access to the NID, AT&T shall obtain entrance permission directly from the subscriber.
- 11.2.6 U S WEST shall offer the NID together with, and separately from, the Distribution Media component of Loop Distribution.

# 11.3 Interface Requirements

- 11.3.1 The NID shall be the interface to subscribers' premises wiring for all loops.
- 11.3.2 The NID shall be at least equal to all the industry standards for NIDs set forth in the following technical references:
  - 11.3.2.1 Bellcore Technical Advisory TA-TSY-000120 "Subscriber Premises or Network Ground Wire";
  - 11.3.2.2 Bellcore Generic Requirement GR-49-CORE "Generic Requirements for Outdoor Telephone Network Interface Devices";

- 11.3.2.3 Bellcore Technical Requirement TR-NWT-00239 "Indoor Telephone Network Interfaces":
- 11.3.2.4 Belicore Technical Requirement TR-NWT-000937 \*Generic Requirements for Outdoor and Indoor Building Entrance\*; and
- 11.3.2.5 Bellcore Technical Requirement TR-NWT-0001 33 "Generic Requirements for Network Inside Wiring."
- 12. Operator Systems

See Part A.

13. E911

See Part A.

14. Directory Assistance Data

See Part A.

15. Signaling Link Transport

### 15.1 Definition:

Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between AT&T-designated Signaling Points of Interconnection ("SPOI") that provides appropriate physical diversity and a cross connect at a U S WEST STP site.

- 15.2 Technical Requirements
  - 15.2.1 Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.
  - 15.2.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:
    - 15.2.1.1 as an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point ("STP") pair; and
    - as a "D-link" which is a connection between two (2) STP pairs in different company networks (e.g., between two (2) STP pairs for two (2) (CLECs)).
  - 15.2.3 Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:

15.2.3.1 An A-link layer shall consist of two (2) links.

15.2.3.2 A D-link layer shall consist of four (4) links.

- 15.2.4 A signaling link layer shall satisfy a performance objective such that:
  - 15.2.4.1 there shall be no more than two (2) minutes down time per year for an A-link layer transport only, and
  - 15.2.4.2 there shall be negligible (less than 2 seconds) down time per year for a D-link layer transport only.
- 15.2.5 Where available, a signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
  - 15.2.5.1 no single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and
  - 15.2.5.2 no two concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-toend).
- 15.2.6 For requested link layers, U S WEST will provide AT&T with the level of diversity available.

# 15.3 Interface Requirements

15.3.1 There shall be a DS-1 (1.544 Mbps) interface at the AT&T-designated SPOIs. Each 56 Kbps transmission path shall appear as a DS-0 channel within the DS-1 interface.

# 16. Signaling Transfer Points (STPs)

## 16.1 Definition:

Signaling Transfer Points ("STP"s) provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer points.

## 16.2 Technical Requirements

- 16.2.1 STPs shall provide signaling access to all other Network Elements connected to the U S WEST SS7 network. These include:
  - 16.2.1.1 U S WEST Local Switching or Tandem Switching;
  - 16.2.1.2 U S WEST Service Control Points/DataBases connected to or resident on service control points;
  - 16.2.1.3 Third-party local or tandem switching systems connected to the U S WEST signaling network; and

- 16.2.1.4 Third-party-provided STPs connected to the U S WEST signaling network.
- 16.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to USWEST's SS7 network. This includes the use of USWEST's SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the USWEST SS7 network (i.e., transit messages). When the USWEST SS7 network is used to convey transit messages, there shall be no alteration of the Integrated Services Digital Network User Part ("ISDNUP") or Transaction Capabilities Application Part ("TCAP") user data that constitutes the content of the message.
- 16.2.3 If a U S WEST tandem switch routes traffic, based on dialed or translated digits, on SS7 trunks between an AT&T local switch and third party local switch, U S WEST's SS7 network shall convey the TCAP messages necessary to provide Call Management features (automatic callback, automatic recall, and screening list editing) between the AT&T local STPs and the STPs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to U S WEST's STPs.
- 16.2.4 STPs shall provide all functions of the MTP as specified in ANSI T1.111 (Reference 12.5.2). This includes:
  - 16.2.4.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
  - 16.2.4.2 Signaling Link functions, as specified in ANSI T1.111.3; and
  - 16.2.4.3 Signaling Network Management functions, as specified in ANSI T1.111.4.
- 16.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation ("GTT") and SCCP Management procedures, as specified in ANSI T1.112.4.
- 16.2.6 In cases where the destination signaling point is either a U S WEST local or tandem switching system or data base, or is an AT&T or third party local or tandem switching system directly connected to U S WEST's SS7 network, U S WEST STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the U S WEST SS7 network, and shall not perform SCCP Subsystem Management of the destination.
- 16.2.7 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on USWEST STPs.
- 16.2.8 STPs shall provide all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 16.5.6. This includes:
  - 16.2.8.1 MTP Routing Verification Test ("MRVT"); and,

## 16.2.8.2 SCCP Routing Verification Test ("SRVT").

- 16.2.9 In cases where the destination signaling point is either a U S WEST local or tandem switching system or database, or is an AT&T or third party local or tandem switching system directly connected to the U S WEST SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the U S WEST SS7 network. This requirement shall be superseded by the specifications for inter-network MRVT and SRVT if and when these become approved ANSI standards and available capabilities of U S WEST STPs.
- 16.2.10 STPs shall be equal to or better than the following performance requirements:
  - 16.2.10.1 MTP Performance, as specified in ANSI T1.111.6; and
  - 16.2.10.2 SCCP Performance, as specified in ANSI T1.112.5.

# 16.3 Interface Requirements

- 16.3.1 U S WEST shall provide the following STPs options to connect AT&T or AT&T-designated local switching systems or STPs to the U S WEST SS7 network:
  - 16.3.1.1 An A-link interface from AT&T local switching systems.
- 16.3.2 Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:
  - 16.3.2.1 An A-link layer shall consist of two (2) links.
- 16.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, such as a DSX-1, in the central office where the USWEST STPs are located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface.
  - USWEST shall offer higher rate DS-1 signaling for interconnecting AT&T local switching systems or STPs with USWEST STPs as soon as these become approved ANSI standards and available capabilities in USWEST's network.
- 16.3.4 U S WEST shall provide MTP and SCCP protocol interfaces that shall conform to all relevant sections in the following specifications:
  - 16.3.4.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and
  - 16.3.4.2 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

# 16.4 Message Screening

- 16.4.1 US WEST shall set message screening parameters in order to accept messages from AT&T local or tandem switching systems destined to any signaling point in the US WEST SS7 network with which the AT&T switching system has a signaling relation.
- 16.4.2 U S WEST shall set message screening parameters in order to accept messages from AT&T local or tandem switching systems destined to any signaling point or network interconnected to the U S WEST SS7 network with which the AT&T switching system has a signaling relation.
- 16.4.3 U S WEST shall set message screening parameters in order to accept messages destined to an AT&T local or tandem switching system from any signaling point or network interconnected to the U S WEST SS7 network with which the AT&T switching system has a signaling relation.
- 16.4.4 U S WEST shall set message screening parameters in order to accept and send messages destined to an AT&T SCP from any signaling point or network interconnected to the U S WEST SS7 network with which the AT&T SCP has a signaling relation.

## 16.5 STP Requirements

- 16.5.1 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, STPs shall be equal to or better than all of the requirements for STPs set forth in the following technical references:
- 16.5.2 ANSI T1.111-1992 American National Standard for Telecommunications Signaling System Number 7 (SS7) - Message Transfer Part (MTP);
- 16.5.3 ANSI T1.111A-1994 American National Standard for Telecommunications -Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;
- 16.5.4 ANSI T1.112-1992 American National, Standard for Telecommunications Signaling System Number 7 (SS7) Signaling Connection Control Part (SCCP);
- 16.5.5 ANSI T1.115-1990 American National Standard for Telecommunications Signaling System Number 7 (SS7) Monitoring and Measurements for Networks;
- 16.5.6 ANSI T1.116-1990 American National Standard for Telecommunications Signaling System Number 7 (SS7) Operations, Maintenance and Administration Part (OMAP);
- 16.5.7 ANSI T1.118-1992 American National Standard for Telecommunications Signaling System Number 7 (SS7) Intermediate Signaling Network Identification (ISNI);
- 16.5.8 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and

16.5.9 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

## 17. Service Control Points/Databases

### 17.1 Definition:

- 17.1.1 Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System and AIN.
- 17.1.2 A Service Control Point ("SCP") is a specific type of Database Network Element functionality deployed in a Signaling System 7 ("SS7") network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., a toll free database stores subscriber record data that provides information necessary to route toll free calls).

### 17.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this section address storage of information, access to information (e.g., signaling protocols and response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to AT&T in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subparagraphs 17.3 through 17.7 of this Attachment:

- 17.2.1 U S WEST shall provide interconnection to SCPs through the U S WEST designated STPs using SS7 network and protocols, as specified in Section 16 of this Attachment, with TCAP as the application layer protocol.
- 17.2.2 Regional SCP pairs shall be available pursuant to applicable technical reference documents.
- 17.2.3 U S WEST shall provide to AT&T database provisioning consistent with the provisioning requirements of this Agreement (e.g., data required, edits, acknowledgments, data format and transmission medium and notification of order completion).
- 17.2.4 The operational interface provided by USWEST shall complete Database transactions (i.e., add, modify, delete) for AT&T subscriber records stored in USWEST databases at parity with which USWEST provisions its own subscriber records.
- 17.2.5 U S WEST shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of USWEST

- network affecting events, testing, dispatch schedule and measurement and exception reports).
- 17.2.6 When and where available, USWEST shall provide billing and recording information to track Database usage consistent with Connectivity Billing and recording requirements as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 17.2.7 U S WEST shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.
- 17.2.8 U S WEST shall provide SCPs/Databases in accordance with the logical security requirements specified in this Agreement.

### 17.3 Number Portability Database

#### 17.3.1 Definition:

The Number Portability ("NP") Database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. NP database functionality shall also include Global Title Translations ("GTT") for calls involving ported numbers even if U S WEST provides GTT functionality in another Network Element. U S WEST shall provide the NP database in accordance with industry standards which shall supersede the following as needed.

### 17.3.2 Requirements

- 17.3.2.1 U S WEST shall make U S WEST NP database available for AT&T switches to query to obtain the appropriate routing number on calls to ported numbers or the industry specified indication that the number is not ported for non-ported numbers in NPA-NXXs that are opened to portability. The specified indication will also be provided when the NPA-NXX is not open to portability.
- 17.3.2.2 Query responses shall provide such additional information (e.g., Service Provider identification) as may be specified in the NP implementation in the relevant regulatory jurisdiction.
- 17.3.2.3 U S WEST shall complete CLASS or LIDB queries routed to the U S WEST network by AT&T switches and return the appropriate response to the querying source.
- 17.3.2.4 The NP database shall provide such other functionality as has been specified in the regulatory jurisdiction in which portability has been implemented.
- 17.3.2.5 Unavailability of the NP database query and GTT applications shall not exceed four (4) minutes per year.
- 17.3.2.6 The U S WEST NP database shall respond to a round trip query within 500 milliseconds or as amended by industry standards.

### 17.3.3 Interface Requirements

U S WEST shall interconnect the signaling interface between the AT&T or other local switch and the NP Database using the TCAP protocol as specified in the technical references in this Agreement, together with the signaling network interface as specified in the technical references in this Agreement, and such further requirements (e.g., AIN or IN protocols) as may be specified by regulatory or other bodies responsible for implementation of number portability.

# 17.4 Line Information Database (LIDB)

This Section 17.4 defines and sets forth additional requirements for the Line Information Database.

### 17.4.1 Definition:

The Line Information Database ("LIDB") is a transaction-oriented database accessible through Common Channel Signaling ("CCS") networks. It contains records associated with subscriber Line Numbers and Special Billing Numbers (in accordance with the requirements in the technical reference in Section 17.6.5). LIDB accepts queries from other Network Elements, or AT&T's network, and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions, such as screening billed numbers, that provide the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the U S WEST CCS network and other CCS networks. LIDB also interfaces to administrative systems. The administrative system interface provides work centers with an interface to LIDB for functions such as provisioning, auditing of data, access to LIDB measurements and reports.

### 17.4.2 Technical Requirements

- 17.4.2.1 U S WEST shall enable AT&T to store in U S WEST's LIDB any line number or special billing number. AT&T will provide U S WEST a non-binding LIDB forecast. Prior to the availability of permanent NP, U S WEST shall enable AT&T to store in U S WEST's LIDB any subscriber Line Number or Special Billing Number record for AT&T resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, for which the NPA-NXX or NXX-0/IXX Group is supported by that LIDB.
- 17.4.2.2 Prior to the availability of permanent NP, U S WEST shall enable AT&T to store in U S WEST's LIDB any subscriber Line Number or Special Billing Number record for AT&T resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, and NPA-NXX and NXX-0/IXX Group Records, belonging to an NPA-NXX or NXX-0/1 XX owned by AT&T.
- 17.4.2.3 Subsequent to the availability of permanent NP, US WEST shall enable AT&T to store in US WEST's LIDB any subscriber Line Number or Special

Billing Number record for AT&T resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, regardless of the number's NPA-NXX or NXX-0/IXX.

- 17.4.2.4 U S WEST shall perform the following LIDB functions (i.e., processing of the following query types as defined in the technical reference in Section 17.6.5) for AT&T's subscriber records in LIDB:
  - 17.4.2.4.1 Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls);
  - 17.4.2.4.2 Calling Card Validation; and
  - 17.4.2.4.3 Originating Line Number Screening (OLNS), when available.
- 17.4.2.5 USWEST shall process AT&T's subscriber records in LIDB at least at parity with USWEST subscriber records, with respect to other LIDB functions (as defined in the technical reference in Section 17.6). USWEST shall indicate to AT&T what additional functions, if any, are performed by LIDB in its network. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall develop an interim procedure to process AT&T subscriber records.
- 17.4.2.6 Within two (2) weeks after a request by AT&T, U S WEST shall provide AT&T with a list of the subscriber data items which AT&T would have to provide in order to support each required LIDB function. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.
- 17.4.2.7 U S WEST shall provide LIDB performance in accordance with section 17.6.5.
- 17.4.2.8 U S WEST shall provide AT&T with the capability to provision (e.g., to add, update, and delete) NPA-NXX and NXX-0/IXX Group Records, and Line Number and Special Billing Number Records, associated with AT&T subscribers, directly into U S WEST's LIDB provisioning process. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.9 Unless directed otherwise by AT&T, in the event end user subscribers change their local service provider to AT&T, USWEST shall maintain subscriber data (for line numbers, card numbers, and for any other types of data maintained in LIDB) so that such subscribers shall not experience any interruption of service due to the lack of such maintenance of subscriber data.

- 17.4.2.10 All additions, updates and deletions of AT&T data to the LIDB shall be made solely at the direction of AT&T.
- 17.4.2.11 USWEST shall provide priority updates to LIDB for AT&T data upon AT&T's request (e.g., to support fraud protection).
- 17.4.2.12 When available, U S WEST shall provide AT&T the capability to directly obtain, through an electronic interface, reports of all AT&T data in LIDB. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.13 [Intentionally left blank for numbering consistency]
- 17.4.2.14 U S WEST shall perform backup and recovery of all of AT&T's data in LIDB as frequently as U S WEST performs backup and recovery for itself and any other Person, including sending to LIDB all changes made since the date of the most recent backup copy. Backup will be performed weekly. When needed, recovery will take place within twenty-four (24) hours.
- 17.4.2.15 US WEST shall provide to AT&T access to LIDB measurements and reports at least at parity with the capability US WEST has for its own subscriber records and that US WEST provides to any other party. Such access shall be electronic. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.16 U S WEST shall provide AT&T with LIDB reports of data which are missing or contain errors, as well as any misroute errors, within the same time period as U S WEST provides such reports to itself. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish a process to meet the requirements of this Section.
- 17.4.2.17 U S WEST shall prevent any access to or use of AT&T data in LIDB by U S WEST personnel or by any other party not authorized in writing by AT&T.
- 17.4.2.18 If and when technically feasible, USWEST shall provide AT&T performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners (in accordance with the technical reference in Section 17.6.5) for subscriber data that is part of an NPA-NXX or NXX-O/IXX wholly or partially owned by AT&T at least at parity with USWEST subscriber data. USWEST shall obtain from AT&T the screening information associated with LIDB Data Screening of AT&T data in accordance with this requirement.
  - 17.4.2.18.1 The Parties agree to investigate technical feasibility of variable LIDB database screening to accomplish 17.4.2.18 above.

17.4.2.19 U S WEST shall accept queries to LIDB associated with AT&T subscriber records, and shall return responses in accordance with the requirements of this Section 17.

### 17.4.3 Interface Requirements

U S WEST shall offer LIDB in accordance with the requirements of this Section 17.4.3.

- 17.4.3.1 The interface to LIDB shall be in accordance with the technical reference in Section 17.6.3.
- 17.4.3.2 The CCS interface to LIDB shall be the standard interface described in Section 17.6.3.
- 17.4.3.3 The LIDB Database interpretation of the ANSI-TCAP messages shall comply with the technical reference in Section 17.6.4. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

### 17.5 Toll Free Number Database

The Toll Free Number Database is an SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional vertical features during call set-up in response to queries from SSPs. This Section 17.5 supplements the requirements of Section 17.2 and 17.7. U S WEST shall provide the Toll Free Number Database in accordance with the following subsections::

# 17.5.1 Technical Requirements

- 17.5.1.1U S WEST shall make the U S WEST Toll Free Number Database available, through its STPs, for AT&T to query from AT&T's designated switch including U S WEST unbundled Local Switching.
- 17.5.1.2The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a U S WEST switch.

# 17.5.2 Interface Requirements

The signaling interface between the AT&T or other local switch and the Toll-Free Number Database shall use the TCAP protocol as specified in the technical reference in Section 17.6.1, together with the signaling network interface as specified in the technical references in Sections 17.6.2 and 17.6.6.

- 17.6 SCPs/Databases shall be at least equal to all of the requirements for SCPs/Databases set forth in the following technical references:
  - 17.6.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, Issue 1 (Bellcore, December 199X);

- 17.6.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP) (Bellcore, March 1994);
- 17.6.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);
- 17.6.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);
- 17.6.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995); and
- 17.6.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995).
- 17.7 Advanced Intelligent Network ("AIN") Access, Service Creation Environment and Service Management System ("SCE/SMS") Advanced Intelligent Network Access
  - 17.7.1 US WEST shall provide mediated access to all US WEST service applications, current or future (if technically feasible), resident in US WEST's SCP through US WEST's STPs. Such access may be from AT&T's switch or US WEST's unbundled local switch.
  - 17.7.2 SCE/SMS AIN Access shall provide AT&T the ability to create service applications in the U S WEST SCE and deploy those applications via the U S WEST SMS to the U S WEST SCP. This interconnection arrangement shall provide AT&T access to the U S WEST development environment and administrative system in a manner at least at parity with U S WEST's ability to deliver its own AIN-based services. SCE AIN Access is the development of service applications within the U S WEST Service Creation Environment capability. SMS AIN Access is the provisioning of service applications via the U S WEST Service Management System capability. AIN trigger provisioning will be accomplished through the U S WEST local unbundled switching.
  - 17.7.3 Services Available. U S WEST shall make SCE hardware, software, testing and technical support (e.g., technical contacts, system administrator) resources available to AT&T. Scheduling of SCE resources shall allow AT&T at least equal priority to U S WEST.
  - 17.7.4 Multi-user Access. The U S WEST SCE/SMS shall allow for multi-user access with proper source code management and other logical security functions.
  - 17.7.5 Partitioning. When available, the USWEST SCP shall partition and protect AT&T service logic and data from unauthorized SMS capability and SCE capability access, execution or other types of compromise.
  - 17.7.6 Training and Documentation. U S WEST shall provide training and documentation for AT&T development staff only in cases in which such training or documentation is not reasonably available from another source. If training or documentation is required in accordance with this Section, it will be provided in a manner at least at

- parity with that provided by USWEST to its development staff. Training will be conducted at a mutually agreed upon location.
- 17.7.7 Access Environment, When AT&T selects SCE/SMS AIN Access, U S WEST shall provide for a secure, controlled access environment on-site. When available, AT&T may request mutually agreed upon remote data connections (e.g., dial up, LAN, WAN).
- 17.7.8 Data Exchange. When AT&T selects SMS AIN Access, USWEST shall allow AT&T to download data forms and/or tables to the USWEST SCP, via the USWEST SMS capability, in the same fashion as USWEST downloads such forms and/or tables for itself.
- 17.7.9 Certification Testing. Certification testing is typically a two step process that includes an off-line unit test followed by an on-line controlled introduction testing into one of each of the USWEST switch types capable of supporting the service. Services created by AT&T will require certification testing by USWEST before the services can be provisioned in the network. The scheduling of USWEST certification testing resources for new AT&T services will be jointly coordinated and prioritized between USWEST and AT&T. AT&T testing requirements will be given equal priority with both USWEST and other provider's requirements. In most circumstances, such testing will be completed within sixty (60) days from the date the application is submitted by AT&T to USWEST for certification. In circumstances involving complex applications requiring additional time for testing, USWEST may request additional time and AT&T will not unreasonably withhold approval of such request. The certification testing procedures described in this Section may be augmented as mutually agreed to by the Parties.
- 17.7.10 Access Standard. SCPs/Databases shall offer SCE/SMS AIN Access in accordance with the requirements of GR-1280-CORE, AIN Service Control Point (SCP) Generic Requirements.
- 17.8 [Intentionally left blank for numbering consistency]
- 17.9 AT&T will provide to U S WEST timely non-binding forecasts of SS7 call transactions, link requirements, database query volumes, etc., as needed for sizing the individual network capabilities that AT&T will utilize under the terms of this Agreement.
- 17.10 CCS Service includes:
  - 17.10.1 Entrance Facility The entrance facility connects AT&T's signaling point of interface with the U S WEST Serving Wire Center ("SWC").
  - 17.10.2 Direct Link Transport ("DLT") The DLT connects the AT&T SWC to the USWESTSTP.
  - 17.10.3 STP Port The STP port provides the switching function at the STP. One (1) STP port is required for each DLT link. The port provides access to the SCP.
- 17.11 Advanced Intelligent Network ("AIN") triggers will be provided only to access USWEST databases. Access to AIN functions is available only through the STP. If AT&T requires

other access, it will submit a Bona Fide Request. If the unbundling of AIN triggers becomes technically feasible without unreasonable harm to the network, U S WEST will be required to provide that element to AT&T at AT&T's expense.<sup>11</sup>

# 18. Additional Requirements

This Section 18 of Attachment 3 sets forth the additional requirements for unbundled Network Elements which U S WEST agrees to offer to AT&T under this Agreement.

## 18.1 Cooperative Testing

#### 18.1.1 Definition:

Cooperative Testing means that USWEST shall cooperate with AT&T upon request or as needed to (a) ensure that the Network Elements and Ancillary Functions and additional requirements being provided to AT&T by USWEST are in compliance with the requirements of this Agreement, (b) test the overall functionality of various Network Elements and Ancillary Functions provided by USWEST to AT&T in combination with each other or in combination with other equipment and facilities provided by AT&T or third parties, and (c) ensure that all operational interfaces and processes are in place and functioning properly and efficiently for the provisioning and maintenance of Network Elements and Ancillary Functions and so that all appropriate billing data can be provided to AT&T.

### 18.1.2 Requirements

Within forty-five (45) days of the Effective Date of this Agreement, AT&T and USWEST will agree upon a process to resolve technical issues relating to interconnection of AT&T's network to USWEST's network and Network Elements and Ancillary Functions. The agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each Party's management. If AT&T and USWEST do not reach agreement on such a process within the 45-day time period, any issues that have not been resolved by the Parties with respect to such process shall be submitted to the dispute resolution procedures set forth in Part A of this Agreement unless both Parties agree to extend the time to reach agreement on such issues.

- 18.1.2.1 U S WEST shall provide AT&T access for testing at any interface between a U S WEST Network Element or Combinations and AT&T equipment or facilities. Such test access shall be sufficient to ensure that the applicable requirements can be tested by AT&T. This access shall be available seven (7) days per week, twenty-four (24) hours per day.
- 18.1.2.2AT&T may test any interfaces, Network Elements or Ancillary Functions and additional requirements provided by USWEST to AT&T pursuant to this Agreement.

MCIm Order, Issue 9b, p. 7.

- 18.1.2.3U S WEST shall provide engineering data as requested by AT&T for the loop components as set forth in this Attachment which AT&T may desire to test. Such data shall include equipment engineering and cable specifications, signaling and transmission path data.
- 18.1.2.4The Parties shall establish a process to provide engineering/office support information on unbundled Network Elements (e.g., central office layout and design records and drawings, system engineering and other applicable documentation) pertaining to a Network Element or Ancillary Function or the underlying equipment that is then providing a Network Element or Ancillary Function to AT&T.
- 18.1.2.5 Upon request from AT&T, U S WEST shall provide to AT&T all applicable test results from U S WEST testing activities on a Network Element or Ancillary Function or additional requirement or the underlying equipment providing a Network Element or Ancillary Function or additional requirements. AT&T may review such test results and may notify U S WEST of any detected deficiencies.
- 18.1.2.6U S WEST shall temporarily provision AT&T designated Local Switching features for testing. Within sixty (60) days of the Effective Date of this Agreement, AT&T and U S WEST shall mutually agree on the procedures to be established between U S WEST and AT&T to expedite such provisioning processes for feature testing.
- 18.1.2.7 Upon AT&T's request, US WEST shall make available technical support to meet with AT&T representatives to provide required support for Cooperative Testing. US WEST shall define the process to gain access to such technical support.
- 18.1.2.8 Dedicated Transport and Loop Feeder may experience alarm conditions due to in-progress tests. U S WEST shall notify AT&T upon removal of such facilities from service.
- 18.1.2.9 U S WEST shall exercise its best efforts to notify AT&T prior to conducting tests or maintenance procedures on Network Elements or Ancillary Functions or on the underlying equipment that is then providing a Network Element or Ancillary Function, that will likely cause a service interruption or degradation of service.
- 18.1.2.10 U S WEST shall provide a single point of contact to AT&T that is available seven (7) days per week, twenty-four (24) hours per day for trouble status, sectionalization, resolution, escalation, and closure. Such staff shall be adequately skilled to allow expeditious problem resolution.
- 18.1.2.11 U S WEST shall make available to AT&T access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.
- 18.1.2.12 AT&T and U S WEST shall complete Cooperative Testing in accordance with the procedures set forth in Attachment 5.

- 18.1.2.13 USWEST shall participate in Cooperative Testing requested by AT&T whenever it is deemed necessary by AT&T to insure service performance, reliability and subscriber serviceability.
- 18.1.2.14 AT&T may accept or reject the Network Element ordered by AT&T if, upon completion of cooperative acceptance testing, the tested Network Element does not meet the requirements stated herein.

#### 18.2 Performance

# 18.2.1 Scope

This section addresses performance requirements for Network Elements and Ancillary Functions to provide local service...

- 18.2.1.2 U S WEST shall work cooperatively with AT&T to determine appropriate performance allocations across Network Elements.
- 18.2.2 AT&T may request real-time, remote data access to performance monitoring and alarm data on events affecting (or potentially affecting) AT&T's traffic. AT&T shall specify the performance to be monitored and alarm data to be collected. To the extent the above is not available, AT&T will use the Bona Fide Request process to gain such capability.
- 18.2.3 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, U S WEST shall provide performance at least equal to the requirements set forth in the following technical references:
  - 18.2.3.1 Bell Communications Research, Inc. Documents
    - 18.2.3.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR). This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve subscribers' lines. Some modules of the LSSGR are also referenced separately in this document.
    - 18.2.3.1.2 TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements.
    - 18.2.3.1.3 TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems.
    - 18.2.3.1.4 TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems.
    - 18.2.3.1.5 TR-NWT-000507, Issue 5, December 1993, LSSGR Transmission, Section 7.

- 18.2.3.1.6 GR-303-CORE, Issue 1, September 1995, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.
- 18.2.3.1.7 GR-334-CORE, Issue 1, June 1994, Switched Access Service: Transmission Parameter Limits and Interface Combinations.
- 18.2.3.1.8 TR-NWT-000335, Issue 3, May 1993, Voice Grade Special Access Services Transmission Parameter Limits and Interface Combinations.
- 18.2.3.1.9 TR-TSY-000529, Issue 2, July 1987, Public Safety LSSGR.
- 18.2.3.1.10 GR-1158-CORE, Issue 2, October 1995, OSSGR Section 22.3: Line Information Database.
- 18.2.3.1.11 TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).
- 18.2.3.1.12 TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- 18.2.3.1.13 TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems.
- 18.2.3.1.14 TR-NWT-000505, Issue 3, May 1991, LSSGR Section 5, Call Processing.
- 18.2.3.1.15 FR-NWT-000271, 1993, Operator Services Systems Generic Requirements (OSSGR).
- 18.2.3.1.16 TR-NWT-001156, Issue 2, July 1993, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.
- 18.2.3.1.17 SR-TSY-001 171, Issue 1, January 1989, Methods and Procedures for System Reliability Analysis.
- 18.2.3.1.18 Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.

# 18.2.3.2 ANSI Standards

- 18.2.3.2.1 ANSI T1.512-1994, Network Performance Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.
- 18.2.3.2.2 ANSI T1.506-1990, Network Performance Transmission Specifications for Switched Exchange Access Network.

18.2.3.2.4 ANSI T1.508-1992, Telecommunications - Network Performance - Loss Plan for Evolving Digital Networks. Also supplement T1.508a-1993.

18.2.3.2.5 ANSI T1.101-1994, Digital Synchronization Network Plan.

## 18.2.3.3TIA/EIA Standards

- 18.2.3.3.1 Requirements not specifically addressed here shall be found in the documents listed in Electronic Industries Association/Telecommunications Industries Association Standards and Engineering Publications.
- 18.2.3.3.2 TIA/EIA TSB-37A, Telephone Network Transmission Model for Evaluating Modem Performance.
- 18.2.3.3.3 TIA/EIA TSB-38, Test Procedure for Evaluation of 2-wire 4 kHz Voiceband Duplex Moderns.

# 18.2.3.4 IEEE Standards

- 18.2.3.4.1 IEEE Standard 743-1984, IEEE Standard Methods and Equipment for Measuring Transmission Characteristics of Analog Voice Frequency Circuits.
- 18.2.3.4.2 ANSI/IEEE Standard 820-1984, Telephone Loop Performance Characteristics.

# 18.2.4 Services and Capabilities

- 18.2.4.1 All Network Elements shall provide performance sufficient, in combination with other Network Elements, to provide the following applications in accordance with the requirements of this Agreement:
  - 18.2.4.1.1 all types of voice services;
  - 18.2.4.1.2 all types of voice-band data modern connections up to and including 28.8 Kbps V-34;
  - 18.2.4.1.3 all types of facsimile transmissions up to and including 14.4 Kbps group 3;
  - 18.2.4.1.4 all CLASS/LASS features; and
  - 18.2.4.1.5 all Operator Systems.
- 18.2.4.2The following capabilities shall be provided as applicable:
  - 18.2.4.2.1 ISDN BRI
  - 18.2.4.2.2 ISDN PRI

- 18.2.4.2.3 Switched Digital Data
- 18.2.4.2.4 Non-Switched Digital Data
- 18.2.4.2.5 Any types of video applications a subscriber may order
- 18.2.4.2.6 Any Coin Services a subscriber may order
- 18.2.4.2.7 Frame Relay and ATM
- 18.2.4.2.8 Private Line Services
- 18.2.5 Specific Performance Requirements for Network Elements and Ancillary Functions
  - 18.2.5.1 The following Sections set forth performance parameters for Network Elements and Ancillary Functions. U S WEST shall provide performance equal to or better than all of the applicable requirements set forth in this Section. Unless otherwise noted, requirements and objectives are given in terms of specific limits.
  - 18.2.5.2 Within ninety (90) days of the Effective Date of this Agreement, U S WEST will analyze the following performance criteria with respect to the standards identified herein and document the U S WEST deviations consistent with the processes outlined in Sections 1.3.1 and 1.3.2 in Part A of this Agreement.
  - 18.2.5.3 Transmission path impairments may be classified as either analog or digital and will depend on the nature of the signal transmitted across the Network Element. Analog impairments are introduced on any analog portion of the Loop, typically between the NID portion of Loop Distribution and the analog to digital (A/D) conversion, and are usually correlated with the length of the physical plant. Digital impairments are introduced by A/D conversion and by interfaces between digital Network Elements. In addition, noise can be introduced by either analog transmission or the A/D conversion.
  - 18.2.5.4 Loop Combination Architecture Constraints
    - 18.2.5.4.1 The following constraints will limit not only the variety of Loop Combination architectures that may be considered, but also the architectures U S WEST may consider to deliver any Ancillary Function or Network Element provided by USWC to AT&T unless otherwise specified by AT&T. These constraints apply to the entire path between the NID portion of Loop Distribution and the U S WEST switch. Any exceptions to these restrictions shall be specifically requested or approved by AT&T in writing.
    - 18.2.5.4.1.1

No more than one (1) pair of A-D conversion.

18.2.5.4.1.2	No more than one (1), 2-to-4-wire hybrid.
18.2.5.4.1.3	No voice compression.
18.2.5.4.1.4	No echo canceled or suppressers.
18.2.5.4.1.5	One (1) digital loss pad per PBX.
18.2.5.4.1.6	No digital gain.

18.2.5.4.1.6 No additional equipment that might significantly increase intermodulation distortion.

### 18.2.5.5 Transmission Impairments

## 18.2.5.5.1 Analog Impairments

18.2.5.5.1.1 Analog impairments are those introduced on portions of the end-to-end circuit on which communications signals are transmitted in analog format. These portions of the transmission path would typically be between NID and an A/D conversion, most commonly on the metallic loop. The performance on the analog portion of a circuit is typically inversely proportional to the length of that circuit.

### 18.2.5.5.1.2 Loss

18.2.5.5.1.2.1 Electrical loss is measured using a 1004 Hz test tone at zero (0.0) db at one milliwatt into a 900 ohm termination.

18.2.5.5.1.2.2 [Intentionally left blank for numbering consistency]

### 18.2.5.5.1.3 Idle Channel Circuit Noise

18.2.5.5.1.3.1 Idle channel circuit noise (C-message) is added by analog facilities, by the A/D conversion of signals, by digital processing equipment (e.g., echo cancelers, digital loss pads), robbed bit signaling, and errors on digital facilities.

18.2.5.5.1.4 Talker Echo

18.2.5.5.1.4.1 The primary source of echo is improper impedance-matching at the 2-to-4 wire hybrid in the USWEST network. The impact on subscriber perception is a function of both echo return loss and delay.

### 18.2.5.5.1.5 Listener Echo

18.2.5.5.1.5.1 Listener echo is a double reflection of a transmitted signal at two (2) different impedance mismatches in the end-to-end connection. While in extreme cases it can degrade voice transmission performance, listener echo is primarily an issue for voiceband data.

# 18.2.5.5.1.6 Propagation and Processing Delay

18.2.5.5.1.6.1 Propagation delay is the delay involved in transmitting information from one location to another. It is caused by processing delays of equipment in the network and delays associated with traveling across transmission facilities.

18.2.5.5.1.6.2 USWEST shall cooperate with AT&T to limit total service propagation and processing delay to levels at parity with those within the USWEST local network.

### 18.2.5.5.1.7 Signal-to-Noise Ratio

18.2.5.5.1.7.1 The Signal-to-Noise ratio (S/N) is a critical parameter in determining voiceband data performance. It is typically measured with a 1004 Hz tone.

#### 18.2.5.5.1.8 C-Notched Noise

### 18.2.5.5.1.9 Attenuation Distortion

18.2.5.5.1.9.1 Attenuation distortion, also known as frequency distortion or gain slope, measures the variations in loss at different frequencies across the voice frequency spectrum (200 Hz - 3400 Hz). It is measured by subtracting the loss at 1004 Hz from the loss at the frequency of interest.

# 18.2.5.5.1.10 Envelope Delay Distortion

18.2.5.5.1.10.1 Envelope Delay Distortion ("EDD") measures the difference in transit time of signals at different frequencies. EDD is measured relative to the transit time of a 1704 Hz tone, and is given in microseconds. EDD is used as an approximation of the group delay of the channel.

### 18.2.5.5.1.11 Phase Jitter

18.2.5.5.1.11.1 Phase jitter measures the unwanted angular modulation of a signal. It is caused by noise or the actual modulation of the signal by another unwanted signal. It displaces the zero crossings of a signal. It is measured in terms of peak-to-peak deviations of a 1004 Hz tone from its nominal zero crossings, and in a particular frequency band (200-300 HZ and either 4-300 Hz or 2-300 Hz). Phase jitter impacts voiceband data performance and can make modems more susceptible to other impairments, including noise.

## 18.2.5.5.1.12 Amplitude Jitter

18.2.5.5.1.12.1 Amplitude jitter is any deviation of the peak value of a 1004 Hz signal from its nominal value. Excessive amounts can impair voiceband data performance. It is primarily caused by noise but can also be caused by phase jitter, gain hits, or single frequency interference.

### 18.2.5.5.1.13 Intermodulation Distortion

18.2.5.5.1.13.1 Intermodulation distortion ("IMD") measures non-linear distortions of a signal. It compares the power of harmonic tones to the power of the transmitted tones. It is measured for both the second and third harmonics of the transmitted tones. IMD is caused by compression or clipping and can impair voiceband data performance.

## 18.2.5.5.1.14 Impulse Noise

18.2.5.5.1.14.1 Impulse noise is a sudden and large increase in noise on a channel for a short duration of time. Impulse noise is measured as a count of the number of times a noise threshold is exceeded during a given time period (typically 5 or 15 minutes). It is caused by protection switching, maintenance activities, electromechanical switching systems, digital transmission errors, and line coding mismatches. Impulse noise sounds like clicking noises or static on voice connections. Impulse noise impairs voiceband data performance.

### 18.2.5.5.1.15 Phase Hits

18.2.5.5.1.15.1 Phase hits are a sudden change in the phase of a signal lasting at least four (4) milliseconds. Phase hits are measured using a threshold that indicates how much the phase of the signal has changed with respect to its nominal phase. Phase hits are caused by protection switching and slips or other synchronization errors. Phase hits can impair voiceband data performance.

# 18.2.5.5.1.16 Gain Hits

18.2.5.5.1.16.1 Gain hits are sudden changes in the level of a signal that last at least four (4) milliseconds. Gain hits are measured against a threshold of typically 2-5 dB relative to the signal's nominal level. Gain hits are usually caused by protection switches and can impair voiceband data performance.

# 18.2.5.5.1.17 Dropouts

18.2.5.5.1.17.1 Dropouts are drops in the level of a signal of 12 dB or more for at least four (4) milliseconds. They are caused by protection switching events, radio fading, and conditions causing digital carrier systems to lose frame. Dropouts are critical for voiceband data performance but, if severe enough, will also affect voice quality.

### 18.2.5.5.1.18 Frequency Shift

18.2.5.5.1.18.1 Frequency shift measures any frequency changes that occur when a signal is transmitted across a channel. It is typically measured using a 1004 Hz tone. Frequency shift has very little impact on

voice or voiceband data performance; however, round-trip frequency shifts can affect the ability of echo cancelers to remain converged.

# 18.2.5.5.1.19 Crosstalk

18.2.5.5.1.19.1 Crosstalk is the presence of signals from other telephone connections on a circuit. Crosstalk can be either intelligible, when speech from other connections can be heard and understood, or unintelligible. Crosstalk is caused by inter-channel interference on the transmission system. Crosstalk is difficult to measure: it requires correlating signals on different circuits or using human listeners to identify its presence. Trouble reports may be used to estimate the probability of crosstalk.

# 18.2.5.5.1.20 Clipping

18.2.5.5.1.20.1 Clipping occurs when part of a transmitted signal is dropped and does not reach the receiving portion on a connection. It can be caused by Digital Speech Interpolation ("DSI") equipment used in Digital Circuit Multiplication Systems ("DCMS") which increase the amount of traffic that transmission facilities carry, and by echo cancelers or echo suppressers.

## 18.2.5.5.1.21 Digital Impairments

18.2.5.5.1.21.1 Digital impairments occur in the signal wherever it is transmitted in digital format. These errors are usually introduced upon conversion of the signal from analog to digital, as well as at interfaces between digital components. While many digital impairments have little impact on subjective voice quality, they can impact data performance.

## 18.2.5.5.1.22 Signal Correlated Distortion

18.2.5.5.1.22.1 Signal correlated distortion ("SCD") is unwanted noise or distortion introduced into a signal through the conversion of a signal from analog to digital format or through digital processing that changes the transmitted signal. SCD affects performance when a signal is being transmitted. The primary sources of SCD are signal encoders, echo cancelers, digital loss pads, and robbed bit signaling. SCD affects both voice and data performance.

18.2.5.5.1.22.2 [Left Blank Intentionally]

## 18.2.5.5.1.23 Slips

18.2.5.5.1.23.1 Slips occur when a frame of digital data is either deleted or repeated because of differences in the clocks used to synchronize digital facilities. Slips sound like clicks or pops on voice calls and have major impact on data performance.

18.2.5.5.1.24 Digital Timing Jitter and Wander

18.2.5.5.1.24.1 Digital timing jitter is the unwanted phase modulation of digital signals at rates above 10 Hz. Wander is the unwanted phase modulation of digital signals at rates below 10 Hz. Digital timing jitter is caused by imperfections in the timing recovery process of regenerators and the stuffing synchronization process used by multiplexer/demultiplexers. Wander is caused by slowly varying changes in digital signal phase due to clock frequency offset and drift, changes in propagation delay of terrestrial facilities due to temperature changes and changes in the distance of satellites from the earth. These events have a major impact on data performance.

#### 18.2.5.5.1.25 DS-1 Errored Seconds

18.2.5.5.1.25.1 An Errored Second ("ES") on a DS-1 facility is any second during which at least 1 bit is in error. The impact of an ES on performance depends on the number of errors that occur during a second. Typically, voice performance is not significantly impacted by ES but it can cause errors in data transmissions.

# 18.2.5.5.1.26 DS-1 Severely Errored Seconds

18.2.5.5.1.26.1 A severely Errored Second ("SES") is any second during which a DS-1 has an error rate exceeding 0.001. An SES can be caused by a loss of framing, a slip, or a protection switch. SESs have impacts on both voice and data performance. For voice, a SES will sound like a burst of noise or static. SESs that occur during a data transmission cause a significant burst of errors and can cause modems to retrain.

# 18.2.5.5.1.27 Short Failure Events

18.2.5.5.1.27.1 A Short Failure Event ("SFE") is a Loss of Frame ("LOF") event of less than two (2) minutes' duration. An LOF event is declared when, on detection of a Loss of Signal ("LOS") or Out-of-Frame ("OOF"), a rise-slope-type integration process starts that declares a LOF after 2.5±0.5 sec. of continuous LOS or OOF. If the LOS or OOF is intermittent the integration process shall decay at a slope of 1/5 the rise slope during the period when the signal is normal. Thus, if the ratio of a LOS or OOF to a normal signal is greater than 1/2, a LOF will be declared. A LOS condition shall be declared when the Network Channel Terminating Equipment has determined that 175±75 successive pulse positions with no pulses of either positive or negative polarity have occurred. An OOF condition shall be declared when either network equipment or digital terminal equipment detects errors in the framing pattern.

# 18.2.5.6 Service Availability and Reliability

Availability refers to the time period during which the service is up and usable for its intended purpose. Reliability refers to the probability that a task, once begun, will be successfully completed.

### 18.2.5.6.1 Blocked Calls

18.2.5.6.1.1 Blocking is the fraction of call origination attempts denied service during a stated measurement period. Blocking occurs because of competition for limited resources within the network.

### 18.2.5.6.2 Downtime

Downtime is the period of time a system is in a failed state.

### 18.2.5.6.3 Dial Tone Delay

18.2.5.6.3.1 Dial-Tone Delay is the time period between a subscriber off-hook and the receipt of dial tone from an originating end office. Dial-Tone Delay has a significant effect on subscriber opinion of service quality.

### 18.2.5.6.4 Dial Tone Removal

18.2.5.6.4.1 Dial tone removal is the time between recognition of the first address digit to the removal of dial tone on the line.

### 18.2.5.6.5 Post Dial Delay

18.2.5.6.5.1 Post Dial Delay ("PDD") is the amount of time a caller must wait after entering or dialing the last digit of a Destination Telephone Number ("DTN") before hearing a valid audible network response. The PDD for an end user is measured from the time the caller has pressed or dialed the last digit of a DTN until receipt of an audible network response.

18.2.5.6.5.2 The requirements given reflect an end-to-end CCS7 protocol for AT&T end users. Where a mixture of CCS7 and inband (MF) signaling protocols are employed, an increase in the PDD can be expected.

### 18.2.5.6.5.2.1 PDD 1 - A - Intra LSO

18.2.5.6.5.2.1.1 Intra-LSO calls do not employ external signaling protocols. The PDD for intra-LSO calls flows are dependent upon the processor cycle time and traffic load conditions. This PDD is assumed to be between subscribers on the same LSO, between the Remote Switch Modules ("RSM") on the same host, or between an RSM and host subscribers.

18.2.5.6.5.2.2 PDD1 - B - LSO to Another Local LSO

18.2.5.6.5.2.3 PDD1 - C - AT&T LSO to Other LSO

18.2.5.6.5.2.3.1 Calls from an AT&T LSO to other LSOs are dependent upon the interface agreements between AT&T and the LSO service provider and may employ CCS7, inband (MF) or a combination of both protocols.

18.2.5.6.5.2.3.2 [Intentionally left blank for numbering consistency]

18.2.5.6.5.2.3.2.1 Network Inter-Connect, CCS7 between AT&T and the LEC.

18.2.5.6.5.2.3.2.2 Inband Multifrequency ("MF") signaling protocols without a U S WEST egress tandem in the connection.

18.2.5.6.5.2.3.2.3 Inband MF signaling protocols with a USWEST egress tandem in the connection.

18.2.5.6.5.2.3.2.3.1 Calls from an AT&T LSO to other LSOs outside the local service area are assumed to have multiple STPs for 1+ traffic in the access and PSTN portion of the connection. The egress from the PSTN for 1+ traffic is again dependent upon the interface Agreements in that service area and may consist of CCS7 or inband MF protocols.

18.2.5.6.5.2.4 Impact of Number Portability (NP)

18.2.5.6.5.2.5 Custom Local Area Subscriber Services (CLASS)

18.2.5.6.5.2.6 Partial Dial Timing

18.2.5.6.5.2.6.1 The interval between each information digit from a subscriber's line, until the LSO or switching system has determined that the digit string is incomplete.

18.2.5.7 Local Switching

18.2.5.8 Operator Systems

Operator System connections shall comply with the requirements for the Loop Combination, Local Switching, Operator Service, and Directory Assistance Service requirements.

18.2.5.9 Common Transport

Specific requirements for this Network Element or Ancillary Function are in the Common Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and U S WEST consistent with sound engineering principles.

18.2.5.10 Dedicated Transport

Specific requirements for this Network Element are in the Dedicated Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance

Requirements." Allocation of impairments shall be negotiated between AT&T and U S WEST consistent with sound engineering principles.

### 18.2.5.11 Signaling Transfer Points

Specific requirements for this Network Element are in the Signaling Transfer Points Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and U S WEST.

### 18.2.5.12 Signaling Link Transport

Specific requirements for this Network Element are in the Signaling Link Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and U S WEST consistent with sound engineering principles.

#### 18.2.5.13 SCPs/Databases

The performance requirements for Databases (NP, LIDB, E911, etc.) vary depending on the Database and the applications it supports. Database-specific performance requirements are included in the Sections of this Attachment addressing individual Network Elements and in applicable Bellcore documents. In all cases, the query response time, availability, accuracy, updating capabilities, and other performance parameters shall at least be at parity with those services as provided by U S WEST to itself.

## 18.2.5.14 Tandem Switching

Specific requirements for this Network Element are in the Tandem Switching Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between AT&T and U S WEST consistent with sound engineering principles.

## 18.2.6 Test and Verification

- 18.2.6.1 U S WEST shall provide unbundled Network Elements to AT&T in such a way as to not unreasonably interfere with AT&T's ability to confirm acceptable performance of the Network Elements provided by U S WEST to AT&T through the use of AT&T test equipment located in its collocated space.
- 18.2.6.2 At AT&T's request through the Bona Fide Request process, if not generally available, U S WEST will provide access to the Network Element sufficient for AT&T to test the performance of that Network Element to AT&T's satisfaction.

At AT&T's request, U S WEST will perform tests to confirm acceptable performance and provide AT&T with documentation of test procedures and results in conformance with U S WEST's internal practices. Additional test procedures may be requested by AT&T through the Bona Fide Requestprocess if not generally available.

# 18.3 Protection, Restoration, and Disaster Recovery

18.3.1 Scope:

This Section refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration, and disaster recovery.

### 18.4 Synchronization

### 18.4.1 Definition:

Synchronization is the function which keeps all digital equipment in a communications network operating at the same average frequency. With respect to digital transmission, information is coded into discrete pulses. When these pulses are transmitted through a digital communications network, all synchronous Network Elements are traceable to a stable and accurate timing source. Network synchronization is accomplished by timing all synchronous Network Elements in the network to a stratum 1 traceable source so that transmission from these network points have the same average line rate.

# 18.4.2 Technical Requirements

The following requirements are applicable to the case where U S WEST provides synchronization to equipment that AT&T owns and operates within a U S WEST location. In addition, these requirements apply to synchronous equipment that is owned by U S WEST and is used to provide a Network Element to AT&T.

- 18.4.2.1 The synchronization of clocks within digital networks is divided into two parts: intra-building and inter-building. Within a building, a single clock is designated as the Building Integrated Timing Supply ("BITS"), which provides all of the DS-1 and DS-0 synchronization references required by other clocks in such building. This is referred to as intra-building synchronization. The BITS receives synchronization references from remotely located BITS such as a primary reference source. Synchronization of BITS between buildings is referred to as inter-building synchronization.
- 18.4.2.2To implement a network synchronization plan, clocks within digital networks are divided into four stratum levels. All clocks in strata 2, 3, and 4 are synchronized to a stratum 1 clock, that is, they are traceable to a stratum 1 clock. A traceable reference is a reference that can be traced back through some number of clocks to a stratum 1 source. Clocks in different strata are distinguished by their free running accuracy or by their stability during trouble conditions such as the loss of all synchronization references.

## 18.4.2.2.1 Intra-Building

Within a building, there may be different kinds of equipment that require synchronization at the DS-1 and DS-0 rates. Synchronization at the DS-1 rate is accomplished by the frequency synchronizing presence of buffer stores at various DS-1 transmission interfaces. Synchronization at the DS-0 rate is accomplished by using a composite clock signal that phase synchronizes the clocks. Equipment requiring DS-0 synchronization frequently does not have adequate buffer storage to accommodate the phase variations among different equipment. Control of phase variations to an acceptable level is accomplished by externally timing all interconnecting DS-0 circuits to a single clock source and by limiting the interconnection of DS-0 equipment to less than 1,500 cable feet. Therefore, a BITS shall provide DS-1 and composite clock signals when the appropriate composite signal is a 64-kHz 5/8<sup>th</sup> duty cycle, return to zero with a bipolar violation every eighth pulse (B8RZ).

# 18.4.2.2.2 Inter-Building

USWEST shall provide inter-building synchronization at the DS-1 rate, and the BITS shall accept the primary and/or secondary synchronization links from BITS in other buildings where necessary. From hierarchical considerations, the BITS shall be the highest stratum clock within the building and USWEST shall provide operations capabilities. When available, such capability includes, but is not limited to, synchronization reference provisioning; synchronization reference status inquiries; timing mode status inquiries; and alarm conditions.

### 18.4.3 Synchronization Distribution Requirements

- 18.4.3.1 Central office BITS shall contain redundant clocks meeting or exceeding the requirements for a stratum 3 clock as specified in ANSI T1.101-1994 and ANSI T1.105.09 and Bellcore GR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.
- 18.4.3.2 Central office BITS shall be powered by primary and backup power sources.
- 18.4.3.3 If both reference inputs to the BITS are interrupted or in a degraded mode (meaning off frequency greater than twice the minimum accuracy of the BITS, loss of frame, excessive bit errors, or in Alarm Indication Signal), then the stratum clock in the BITS shall provide the necessary bridge in timing to allow the network to operate without a frame repetition or deletion (slip free) with better performance than specified in these technical references specified in 18.4.3.1.
- 18.4.3.4DS-1s multiplexed into a SONET synchronous payload envelope within an STS-n (where "n" is defined in ANSI T1.105-1995) signal shall not be used as reference facilities for network synchronization.

- 18.4.3.5The total number of Network Elements cascaded from the stratum 1 source shall be minimized.
- 18.4.3.6A Network Element shall receive the synchronization reference signal only from another Network Element that contains a clock of equivalent or superior quality (stratum level).
- 18.4.3.7U S WEST shall select for synchronization those facilities shown to have the greatest degree of availability (absence of outages).
- 18.4.3.8Where possible, all primary and secondary synchronization facilities shall be physically diverse (this means the maximum feasible physical separation of synchronization equipment and cabling).
- 18.4.3.9 No timing loops shall be formed in any combination of primary and secondary facilities.
- 18.4.3.10 U S WEST shall continuously monitor the BITS for synchronization related failures.
- 18.4.3.11 U S WEST shall continuously monitor all equipment transporting synchronization facilities for synchronization related failures.
- 18.4.3.12 For non-SONET equipment, USWEST shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.
- 18.4.3.13 For SONET equipment, U S WEST shall provide synchronization facilities that have time deviation (TDEV) for integration times greater than 0.05 seconds and less than or equal to ten (10) seconds, that is less than or equal to 100 nanoseconds. TDEV, in nanoseconds, for integration times greater than ten (10) seconds and less than 1000 seconds, shall be less than 31.623 times the square-root of the integration time.

## 18.5 SS7 Network Interconnection

### 18.5.1 Definition:

SS7 Network Interconnection is the interconnection of AT&T local Signaling Transfer Point (STPs) with USWEST STPs. This interconnection provides connectivity that enables the exchange of SS7 messages among USWEST switching systems and databases, AT&T local or tandem switching systems, and other third-party switching systems directly connected to the USWEST SS7 network.

### 18.5.2 Technical Requirements

18.5.2.1 SS7 Network Interconnection shall provide signaling connectivity to all components of the U S WEST SS7 network through U S WEST STPs. These include:

- 18.5.2.1.1 U S WEST local or tandem switching systems;
- 18.5.2.1.2 US WEST databases; and
- 18.5.2.1.3 other third-party local or tandem switching systems.
- 18.5.2.2 The connectivity provided by SS7 Network Interconnection shall support the functions of U S WEST switching systems and databases and AT&T or other third-party switching systems with A-link access to the U S WEST SS7 network.
- 18.5.2.3 SS7 Network Interconnection shall provide transport for certain types of Transaction Capabilities Application Part ("TCAP") messages. If traffic is routed based on dialed or translated digits between an AT&T local switching system and a USWEST or other third-party local switching system, either directly or via a USWEST tandem switching system, then it is a requirement that the USWEST SS7 network convey via SS7 Network Interconnection the TCAP messages necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the AT&T local STPs and the USWEST or other third-party STPs.
- 18.5.2.4 When the capability to route messages based on Intermediate Signaling Network Identifier ("ISNI") is generally available on U S WEST STPs, the U S WEST SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the U S WEST switch routes traffic based on a Carrier Identification Code ("CIC").
- 18.5.2.5 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1. 111. This includes:
  - 18.5.2.5.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
  - 18.5.2.5.2 Signaling Link functions, as specified in ANSI T1.111.3; and
  - 18.5.2.5.3 Signaling Network Management functions, as specified in ANSI T1.111.4.
- 18.5.2.6 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112.
- 18.5.2.7 Where the destination signaling point is a U S WEST switching system or database, or is another third-party local or tandem switching system directly connected to the U S WEST STPs (SS7 network), SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.
- 18.5.2.8 Where the destination signaling point is an AT&T local or tandem switching system, SS7 Network Interconnection shall include

intermediate GTT of messages to a gateway pair of AT&T local STPs, and shall not include SCCP Subsystem Management of the destination.

- 18.5.2.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.
- 18.5.2.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.
- 18.5.2.11 If and when inter-network MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of both U S WEST and AT&T STPs, SS7 Network Interconnection shall provide these functions of the OMAP.
  - 18.5.2.11.1 The Parties shall develop a mutually agreed upon interim process for MRVT and SRVT within ninety (90) days of the Effective Date of this Agreement. Either Party shall be allowed to shut off MRVT/SRVT for preservation of network integrity.
- 18.5.2.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:
  - 18.5.2.12.1 MTP Performance, as specified in ANSI T1.111.6;
  - 18.5.2.12.2 SCCP Performance, as specified in ANSI T1.112.5; and
  - 18.5.2.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.

## 18.5.3 Interface Requirements

18.5.3.1 U S WEST shall offer the following SS7 Network Interconnection options to connect AT&T or AT&T-designated STPs to the U S WEST STPs (SS7 network):

18.5.3.1.1 D-link interface from AT&T STPs.

18.5.3.2 Each interface shall be provided by one or more sets (layers) of signaling links, as follows:

18.5.3.2.1 A D-link layer shall consist of four links.

18.5.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, (e.g., DSX-1) in the central office where the U S WEST STPs are located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface. U S WEST shall offer higher rate DS-1 signaling links for interconnecting AT&T local switching systems or STPs with U S WEST STPs as soon as these become approved ANSI standards and available capabilities of U S WEST STPs.

- 18.5.3.3.1 In each LATA, there will be two (2) SPOIs. The requirement for two SPOIs is driven by the critical importance attached by the Parties to signaling link diversity.
- 18.5.3.3.2 Each Party will designate one (1) of the two (2) SPOIs in a reasonable and efficient location in the LATA. A SPOI can be any existing cross connect point in the LATA.
- 18.5.3.3.3 Each signaling link requires a port on each Party's STP.
- 18.5.3.4 Where available, the U S WEST central office shall provide intraoffice diversity between the SPOIs and the U S WEST STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to U S WEST's STPs.
- 18.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. These protocol interfaces shall conform to the following specifications:
  - 18.5.3.5.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);
  - 18.5.3.5.2 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;
  - 18.5.3.5.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
  - 18.5.3.5.4 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).
- 18.5.3.6 To the extent technically feasible, USWEST shall set message screening parameters to block accept messages from AT&T local or tandem switching systems destined to any signaling point in the USWEST SS7 network with which the AT&T switching system has a legitimate signaling relation.
- 18.5.4 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following technical references:
  - 18.5.4.1 ANSI T1.110-1992 American National Standard Telecommunications Signaling System Number 7 (SS7) General Information;
  - 18.5.4.2 ANSI T1.111-1992 American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP);

- 18.5.4.3 ANSI T1.111A-1994 American National Standard for Telecommunications Signaling System Number 7 (SS7) Message Transfer Part (MTP) Supplement;
- 18.5.4.4 ANSI T1.112-1992 American National Standard for Telecommunications
   Signaling System Number 7 (SS7) Signaling Connection Control Part (SCCP);
- 18.5.4.5 ANSI T1.113-1995 American National Standard for Telecommunications Signaling System Number 7 (SS7) Integrated Services Digital Network (ISDN) User Part;
- 18.5.4.6 ANSI T1.114-1992 American National Standard for Telecommunications Signaling System Number 7 (SS7) Transaction Capabilities Application Part (TCAP);
- 18.5.4.7 ANSI T1.115-1990 American National Standard for Telecommunications Signaling System Number 7 (SS7) Monitoring and Measurements for Networks:
- 18.5.4.8 ANSI T1.116-1990 American National Standard for Telecommunications Signaling System Number 7 (SS7) Operations, Maintenance and Administration Part (OMAP);
- 18.5.4.9 ANSI T1.118-1992 American National Standard for Telecommunications Signaling System Number 7 (SS7) Intermediate Signaling Network Identification (ISNI);
- 18.5.4.10 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);
- 18.5.4.11 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service;
- 18.5.4.12 Bellcore GR-1428-CORE, CCS Network Interface Specification ("CCSNIS") Supporting Toll Free Service;
- 18.5.4.13 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
- 18.5.4.14 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

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## INTERCONNECTION

#### 1. Definitions

1.1 For purposes of this Attachment 4, "Interconnection" is the linking of the USWEST and AT&T networks for the mutual exchange of traffic. Interconnection does not include the transport and termination of traffic. Interconnection is provided by virtual or physical collocation, entrance facilities or meet point arrangements.

## 2. General Description

- 2.1 US WEST will provide Interconnection at any technically feasible point, subject to negotiations between the Parties; such points may include, but not be limited to, a Meet Point, the line side distribution frame of the local switch, the trunk side distribution frame of the local switch, trunk interconnection points of the tandem switch, central office cross-connect points, and Signaling Transfer Points necessary to exchange traffic and access call related databases.
- 2.2 AT&T shall designate at least one POI in the LATA in which AT&T originates local traffic and interconnects with US WEST.<sup>2</sup> AT&T will be responsible for engineering and maintaining its network on its side of the POI. If and when the Parties choose to interconnect at a mid-span meet, AT&T and US WEST will jointly provision the fiber optic facilities that connect the two (2) networks and shall share the financial and other responsibilities for that facility.
- 2.3 Within ten (10) Business Days of AT&T's request for any POI, U S WEST shall provide any information in its possession or available to it regarding the environmental conditions of the interconnection route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in U S WEST's possession, or in the possession of a current or former agent, contractor, employee, lessor, or tenant of U S WEST's.
- US WEST shall allow AT&T to perform any environmental site investigations, including, but not limited to, asbestos surveys, AT&T deems to be necessary in support of its collocation needs. AT&T shall advise US WEST in writing of its intent to conduct any such investigations, and shall receive written approval from US WEST to proceed with the investigation, which approval shall not be unreasonably withheld. AT&T shall indemnify US WEST in accordance with the provisions of Section 18 of Part A of this Agreement for any loss or claim for damage suffered by US WEST as a result of AT&T's actions during any site inspection.

MCIm Order, p. 6 at Issue 2 and AT&T Order at Issue 3(a).

MClm Order, p. 6 at Issue 2 and AT&T Order at Issue 3(a).

## 3. Location of Interconnection

- 3.1 AT&T will be responsible for implementing and maintaining its network on its side of the POI. US WEST will be responsible for implementing and maintaining its network on its side of the POI. If and when the Parties choose to interconnect at a Meet Point, AT&T and US WEST will jointly provision the fiber optic facilities that connect the two networks and shall proportionately share the financial and other responsibilities for that facility based on the reasonably negotiated Meet Point percentage.
- 3.2 If Interconnection is complicated by the presence of environmental contamination or hazardous materials, and an alternative route is available, USWEST shall make such alternative route available for AT&T's consideration.

#### 4. Collocation

4.1 Interconnection may be accomplished through either virtual or physical Collocation. The terms and conditions under which Collocation will be available are described in Part A of this Agreement.

## 5. Entrance Facility

5.1 Interconnection may be accomplished using an entrance facility without the need for collocation. An entrance facility extends from the Point of Interface to a point within a U S WEST central office.

#### 6. Quality of Interconnection

6.1 US WEST will not, for the purpose of Interconnection, provide to AT&T less favorable terms and conditions than it provides itself or any other Person or in a manner less efficient than it would impose on itself or any other Person. The quality of Interconnection will be at least equal to that US WEST provides to itself or any other Person. To the extent that AT&T requests higher or lower quality Interconnection, AT&T agrees to use the Bona Fide Request process described in Part A of this Agreement.

#### 7. Points of Interconnection

7.1 Upon a request for specific point to point routing, USWEST will make available to AT&T information indicating the location and technical characteristics of USWEST's network facilities. The following alternatives are negotiable and include, but are not limited to: (a) a DS-1 or DS-3 entrance facility, where facilities are available (where facilities are not available and USWEST is required to build special or additional facilities, special construction charges may apply); (b) virtual collocation; (c) physical collocation; and (d) negotiated Meet Point facilities. Each Party is responsible for providing its own facilities up to the Meet Point. The Parties will negotiate the facilities arrangement between their networks.

## 8. Trunking Requirements

- 8.1 U S WEST agrees to provide designed interconnection facilities that meet the same industry standards for technical criteria and service standards, such as the probability of blocking in peak hours and transmission standards.
- 8.2 The Parties shall initially reciprocally terminate local exchange traffic and intraLATA/interLATA toll calls originating on each other's networks as follows:
  - There shall be no restrictions on traffic types carried. Until the access structure is revised, to accommodate non-segregated traffic, pursuant to rules promulgated by the FCC or the Commission, two-way trunk groups will be established wherever practical, based upon AT&T's request. If Local Traffic and Toll Traffic are combined in one (1) trunk group, AT&T shall provide a measure of the amount of local and toll traffic relevant for billing purposes to USWEST. USWEST may audit the traffic reported to it by AT&T if it has reason to believe the reported measurement is not accurate. Such audit shall be conducted in accordance with the Audit Section set forth in this Agreement.3 Exceptions to this provision will not be based on technical infeasibility, but will be based on billing, signaling, and network requirements. For example, exceptions include: (a) billing requirements - switched access vs. local traffic, (b) signaling requirements - MF vs. SS7, (c) network requirements - Directory Assistance traffic to TOPS tandems, and (d) one-way trunks for 911/E911. The following is the current list of traffic types that require separate trunk groups, unless otherwise specifically stated in this Agreement:
    - (a) intraLATA toll and interLATA switched access trunks
    - (b) EAS/local trunks
    - (c) Directory Assistance trunks
    - (d) 911/E911 trunks
    - (e) Operator Services trunks
    - (f) Non-U S WEST toll (transit toll to other providers)
    - (g) Non-U S WEST local (transit local to other providers)
    - (h) Commercial Mobile Radio Service/Wireless traffic
- 8.3 Separate trunk groups will be established connecting AT&T's switch or AT&T's Operator Service center to U S WEST's Operator Service center for operator-assisted busy line interrupt/verify. For traffic from the U S WEST network to AT&T for Operator Services, U S WEST will provide one (1) trunk group per LATA served by the local U S WEST switch.
- 8.4 Trunk Servicing
  - 8.4.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by use of an Access Service Request ("ASR") or another industry standard for local service ordering.

AT&T Order, p. 37.

- 8.4.2 As further described in this Agreement, both Parties will jointly manage the capacity of Local Interconnection trunk groups. U S WEST's trunk servicing group will send a Trunk Group Service Request ("TGSR"), or another industry standard eventually adopted to replace the TGSR, to AT&T to trigger changes U S WEST desires to the Local Interconnection trunk groups based on U S WEST's capacity assessment. AT&T will issue an ASR or other industry ordering standard to U S WEST:
  - (a) within ten (10) Business Days after receipt of the TGSR, upon review of and in response to U S WEST's TGSR, or
  - (b) at any time, as a result of AT&T's own capacity management assessment, to begin the provisioning process. The interval used for the provisioning of Local Interconnection trunk groups shall be no longer than the standard interval for the provisioning of U S WEST's Switched Access service and shall be consistent with U S WEST's actual provisioning intervals for its own Switched Access customers.
- 8.4.3 US WEST will attempt to meet AT&T's requested due date for the provision of Local Interconnection trunk groups. Where the installation of Local Interconnection trunk groups is required within a time that is shorter than the standard interval, the Parties will make all reasonable efforts and cooperate in good faith to ensure that the mutually agreed upon due date is met.
- 8.4.4 Orders that comprise a major project may be submitted at the same time, in which case their implementation shall be jointly planned and coordinated. Major projects are those that require the coordination and execution of multiple orders or related activities between and among U S WEST and AT&T work groups, including, but not limited to, the initial establishment of Local Interconnection or Meet Point trunk groups and service in an area, NXX code moves, re-homes, facility grooming, or network rearrangements.

## 8.5 Trunking Requirements

- 8.5.1 Trunk group connections will be made at a DS-1 or multiple DS-1 level for exchange of EAS/local, intraLATA toll, wireless/Commercial Mobile Radio Service, and Switched Access Traffic. Ancillary Service trunk groups will be made below a DS-1 level, as agreed to by the Parties.
- 8.5.2 Where CCS is not available, in-band multi-frequency (MF) wink start signaling will be provided. This MF arrangement will require a separate local trunk circuit between AT&T's switch and U S WEST's tandems. Reference Technical Pub. TR-314 and TR394.

## 9. Service Interruptions

9.1 Standards and procedures for notification of trunk disconnects will be jointly developed by the Parties within ninety (90) days of the Effective Date of this Agreement. Neither Party shall be expected to maintain active status for a trunk disconnected by the other Party for an extended or indefinite period of time.

- 9.2 The characteristics and methods of operation of any circuits, facilities or equipment of either Party connected with the services, facilities or equipment of the other Party pursuant to this Agreement shall not: (a) interfere with or impair service over any facilities of the other Party, its Affiliates, or its connecting and concurring carriers involved in its services; (b) cause damage to their plant; (c) violate any applicable law or regulation regarding the invasion of privacy of any communications carried over the Party's facilities; or (d) create hazards to the employees of either Party or to the public.
- 9.3 Each Party shall be solely responsible, and bear the expense, for the overall design of its services. Each Party shall also be responsible for any redesign or rearrangement of its services that may be required because of changes in facilities, operations or procedures, minimum network protection criteria, and operating or maintenance characteristics of the facilities. If one Party creates a circumstance causing additional costs to the other Party, the other Party may collect construction charges from the first Party.
- 9.4 To facilitate trouble reporting and to coordinate the repair of the service provided by each Party to the other under this Agreement, each Party shall designate and define a Trouble Reporting Control Office ("TRCO") for such service. Each Party shall furnish a trouble reporting telephone number for the designated TRCO. This number shall have access to the location where facility records are normally located and where current status reports on any trouble reports are readily available. Current and historical trouble reports will be made available, if necessary. Alternative out-of-hours procedures shall be established to ensure access to a location that is staffed and has the authority to initiate corrective action.
- 9.5 Where new facilities, services and arrangements are installed to rectify the service interruption, the TRCO shall ensure that continuity exists and take appropriate transmission measurements before advising the other Party that the new circuit is ready for service.
- 9.6 The Parties shall cooperate in isolating trouble conditions. Before either Party reports a trouble condition, it shall use reasonable efforts to isolate the trouble.
- 9.7 In cases where a trouble condition affects a significant portion of the other Party's service, the Parties shall assign the same priority provided to other interconnecting carriers.

## 10. Forecasting

- 10.1 The Parties agree that during the first year of Interconnection, joint forecasting and planning meetings will take place no less frequently than once per quarter.
- The Parties shall establish joint forecasting responsibilities for traffic utilization over trunk groups. Intercompany forecast information must be provided by the Parties to each other four (4) times a year. The quarterly forecasts shall include forecasted requirements for each trunk group identified in Paragraph 8.2.1 of this Attachment. In addition, for tandem-switched traffic, the forecast shall include the quantity of tandem-switched traffic forecasted for each subtending end office. The Parties recognize that, to the extent historical traffic data can be shared between the Parties, the accuracy of the forecasts will improve. Forecasts shall be for a minimum of three (3) (current and plus-1 and plus-2) years and shall include:

- 10.2.1 the use of Common Language Location Identifier (CLLI-MSG), which is described in Bellcore documents BR 795-100-100 and BR 795-400-100; and
- 10.2.2 a description of major network projects anticipated for the following six (6) months that could affect the other Party. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period. This planning will include the issues of network capacity, forecasting and compensation calculation, where appropriate.
- 10.2.3 If forecasts vary significantly, the Parties shall meet to review and reconcile such forecasts.
  - 10.2.3.1 If the Parties are unable to reach such a reconciliation, the Local Interconnection trunk groups shall be provisioned to the higher forecast. At the end of three (3) months, the utilization of the Local Interconnection trunk groups will be reviewed and if the average CCS utilization for the third month is under seventy five percent (75%) of capacity, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity.
  - 10.2.3.2 If the Parties agree on the original forecast and then it is determined that a trunk group is under seventy five percent (75%) of CCS capacity on a monthly-average basis for each month of any three-month period, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity. In all cases, grade of service objectives identified in this Agreement shall be maintained.
- 10.3 Each Party shall provide a specified point of contact for planning, forecasting and trunk serving purposes.
- Trunking can be established to tandems or end offices or a combination of both via either one-way or two-way trunks. Trunking will be at the DS-0 level, DS-1 level, DS-3 level, or any other technically feasible level, subject to network disclosure requirements of the FCC. Initial trunking will be established between AT&T's switching centers and USWEST's access tandem(s). The Parties will utilize direct end office trunking under the following conditions:
  - 10.4.1 Tandem exhaust If a tandem through which the Parties are interconnected is unable to, or is forecasted to be unable to, support additional traffic loads for any period of time, the Parties will mutually agree on an end office trunking plan that will alleviate the tandem capacity shortage and ensure completion of traffic between AT&T and U S WEST subscribers.
  - 10.4.2 Traffic volume The Parties shall install and retain direct end office trunking sufficient to handle actual or reasonably forecasted traffic volumes, whichever is greater, between an AT&T switching center and a U S WEST end office where the local traffic exceeds or is forecasted to exceed 512 CCS at the busy hour.

10.4.3 Mutual agreement - The Parties may install direct end office trunking upon mutual agreement in the absence of conditions (1) or (2) above, which agreement shall not unreasonably be withheld.

#### 10.5 Grade of Service:

A blocking standard of one percent (1%) during the average busy day-busy hour, as defined by each Party's standards, for final trunk groups between an AT&T end office and a US WEST access tandem carrying Meet Point traffic shall be maintained. All other final trunk groups are to be engineered with a blocking standard of one percent (1%). Direct end office trunk groups are to be engineered with a blocking standard of one percent (1%).

## 11. Signaling

- Signaling protocol. The Parties will interconnect their networks using SS7 signaling as defined in GR-317 and GR-394, including ISDN User Part ("ISUP") for trunk signaling and Transaction Capabilities Application Part ("TCAP") for CCS-based features in the interconnection of their networks. All appropriate industry standards for signaling interoperability will be followed.
- 11.2 The Parties will provide CCS to each other in conjunction with all trunk groups supporting Local, Transit, and Toll Traffic. The Parties will cooperate on the exchange of TCAP messages to facilitate full interoperability of CCS-based features between their respective networks, including all CLASS features and functions. All CCS signaling parameters will be provided, including automatic number identification (ANI), originating line information (OLI), calling party category, charge number, etc. For terminating Feature Group D, the Parties will pass CPN if it receives CPN from Feature Group D carriers. All privacy indicators will be honored. Where available, network signaling information such as Transit Network Selection ("TNS") parameter (CCS platform) and CIC/OZZ information (non-CCS environment) will be provided by the Parties wherever such information is needed for call routing or billing. The Parties will follow all appropriate industry standards pertaining to TNS and CIC/OZZ codes.
- 11.3 Standard Interconnection facilities shall be Extended Superframe (ESF) with B8ZS line code. Where ESF/B8ZS is not available, AT&T will agree to using other Interconnection protocols on an interim basis until the standard ESF/B8ZS is available. U S WEST will provide anticipated dates of availability for those areas not currently ESF/B8ZS compatible.
- 11.4 Where AT&T is unwilling to utilize an alternate Interconnection protocol, AT&T will provide USWEST an initial forecast of 64 Kbps clear channel capability ("64K CCC") trunk quantities within thirty (30) days of the Effective Date of this Agreement consistent with the forecasting agreements between the Parties. Upon receipt of this forecast, the Parties will begin joint planning for the engineering, procurement, and installation of the designated 64K CCC Local Interconnection trunk groups and the associated B8ZS Extended Super Frame facilities, for the purpose of transmitting 64K CCC data calls between AT&T and USWEST. Where additional equipment is required, such equipment will be obtained, engineered, and installed on the same basis and with the same intervals as any similar growth job for an IXC, AT&T or USWEST internal customer demand for 64K CCC trunks. Where technically feasible, these trunks will be established as two-way.

## 12.4 Ordering

- 12.1 AT&T may order Interconnection points beyond those listed in the FCC rules using the ASR process or other industry standard for local service ordering.
- 12.2 US WEST must provide installation to AT&T in the shorter of the time it provides installation to itself or any other Person. US WEST must provide installation to AT&T within ten (10) Business Days if it does not provide the same installation to itself or any other Person.
- 12.3 If AT&T requests a shorter installation time than required by the provisions of this Attachment, U S WEST may charge AT&T for any increased expense incurred for such installation.
- 12.4 AT&T shall, on each order for Local Interconnection trunks, specify the AT&T NXXs that are assigned to the trunks.

## 13. Network Management

#### 13.1 Protective Protocols

Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps on traffic toward each others network when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload.

#### 13.2 Rerouting Protocols

Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Rerouting controls will only be used when mutually agreed to by the Parties.

#### 13.3 Mass Calling

AT&T and U S WEST shall cooperate and share pre-planning information, where available and in compliance with federal and state regulations, regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.

#### 14. Usage Measurement

14.1 When applicable, each Party shall provide to the other:

MCIm Order, p. 5 at Issue 1.

- 14.1.1 Bellcore AMA formatted records to generate bills to the other Party;
- 14.1.2 measurement of minutes of use over Local Interconnection trunk groups in actual conversation seconds. The total conversation seconds over each individual Local Interconnection trunk group will be totaled for the entire monthly bill-round and then rounded to the next whole minute; and
- 14.1.3 within twenty (20) calendar days after the end of each quarter (commencing with the first full quarter after the Effective Date of this Agreement), a usage report with the total traffic volume described in terms of minutes and messages and by call type (i.e., local, toll, and other) terminated to each other over SS7 local interconnection trunk groups.

## 15. Audiotext and Mass Announcement Services

The Parties agree that access to the audiotext, mass announcement and information services of one Party may be made available to the other Party upon execution of a separate agreement or an amendment to this Agreement.

#### 16. Interconnection to Network Elements

- 16.1 Technical Requirements
  - 16.1.1 When requested by AT&T, US WEST shall provide Interconnection between US WEST Network Elements provided to AT&T and AT&T's network at transmission rates designated by AT&T. If additional equipment beyond that which US WEST currently has in place is planning to put in place or is otherwise required to have in place is required to meet such transmission rates, the installation and/or acquisition of such equipment shall be accomplished pursuant to the ordering process set forth in this Agreement.
  - 16.1.2 Traffic shall be combined and routed as follows:
    - 16.1.2.1 At AT&T's request, U S WEST shall receive AT&T traffic destined to the U S WEST Operator Systems Network Element, on trunks from an AT&T end-office or an AT&T tandem.
    - 16.1.2.2) At AT&T's request, USWEST shall receive AT&T CAMA-ANI (Centralized Automatic Message Accounting Automatic Number identification) traffic destined to the USWEST 911 PSAPs, or E911 tandems, on trunks from an AT&T end-office.
    - 16.1.2.3 At AT&T's request, USWEST shall receive AT&T SS7 traffic destined to any USWEST E911 tandem on trunks from an AT&T end-office, when SS7 E911 signaling is available in USWEST's network.
  - 16.1.3 When requested by AT&T and a third party carrier, USWEST shall provide interconnections between AT&T's network, and the other carrier's network through the USWEST network at transmission rates designated by AT&T, including, but

not limited to, DS-1, DS-3, and STS-1, where available. US WEST shall combine and route traffic to and from other local carriers and interLATA carriers through the US WEST network, and, at AT&T's request, US WEST shall record and keep records of such traffic for AT&T billing purposes to the extent possible.

- 16.1.4 U S WEST shall provide two-way trunk groups for Interconnections. At AT&T's request, and consistent with an efficient network architecture, U S WEST shall provide unidirectional traffic on such trunks, in either direction, effectively operating them as if they were one-way trunk groups.
- 16.1.5 All trunking provided by U S WEST shall adhere to the applicable performance requirements set forth in the "General Performance Requirements" section of this Agreement, pursuant to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
- 16.1.6 At AT&T's request, US WEST shall work cooperatively with AT&T to provide for overflow routing from a given trunk group or groups onto another trunk group or groups as AT&T designates.
- 16.1.7 U S WEST and AT&T shall agree on the establishment of two-way trunk groups for the exchange of traffic for other IXCs. These trunk groups can be provided in a meet point arrangement.
- 16.1.8 Interconnection shall be made available upon AT&T's request at any technically feasible Point of Interface. All trunk interconnections shall be provided, including SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID (Direct Inward Dialing), CAMA-ANI, and trunking necessary so that INP can be provided.

#### 16.2 Trunk Interface Requirements

## 16.2.1 E911 Trunks

- 16.2.1.1 U S WEST shall allow AT&T to provide direct trunking to each U S WEST E911 end office or tandem, as is appropriate for the applicable serving area. These trunks are to be provided as one-way trunks from a given AT&T end office to the U S WEST E911 end office or tandem.
- 16.2.1.2) U S WEST shall provide for overflow E911 traffic in the same manner that U S WEST provides E911 overflow for itself.

#### 16.2.2 S911 Trunks

If and when S911 tandems become available in the U S WEST network, U S WEST shall allow AT&T to provide direct trunking to each U S WEST S911 tandem. Such SS7 trunks are to be provided as one-way trunks from a given AT&T end-office to the U S WEST S911 tandem.

16.2.3 Local Switch and Access Tandem Trunks

- 16.2.3.1 U S WEST shall provide trunks groups provisioned exclusively to carry intraLATA Toll Traffic, as designated by AT&T.
- 16.2.3.2 U S WEST shall provide trunk groups provisioned exclusively to carry interLATA traffic, as designated by AT&T.
- 16.2.3.3 U S WEST shall provide SS7 trunks which provide SS7 Interconnection. At AT&T's request, MF trunks may be substituted for SS7 trunks where applicable.
- 16.2.3.4 U S WEST shall simultaneously route calls based on dialed digits (in accordance with the standard GR-317-CORE), and Carrier Identification Code (in accordance with the standard GR-394-CORE) over a single SS7 trunk group.

## 16.2.4 US WEST Operator Services Trunk

U S WEST shall provide Operator Services trunks as one-way trunks from the U S WEST network to the AT&T network.

- 16.3 Network Interconnection between U S WEST and AT&T shall meet or exceed all of the requirements for network Interconnection set forth in the following technical references:
  - 16.3.1 GR-317-CORE, Switching System Generic Requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;
  - 16.3.2 GR-394-CORE, Switching System Generic Requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;
  - 16.3.3 FR-NWT-000271, OSSGR Operator Services Systems Generic Requirements, Bellcore, 1994 Edition; and
  - 16.3.4 FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition.

## 17. Reciprocal Traffic Exchange

#### 17.1 Scope

Reciprocal traffic exchange addresses the exchange of traffic between AT&T end users and U S WEST end users. If such traffic is local, the provisions of this Agreement shall apply. Where either Party acts as an intraLATA toll provider or interLATA IXC or where either Party interconnects and delivers traffic to the other from third parties, each Party shall bill such third parties the appropriate charges pursuant to its respective tariffs or contractual offerings for such third party terminations. Absent a separately negotiated agreement to the contrary, compensation for reciprocal traffic exchange applies solely to traffic exchanged directly between the Parties without the use of third party transit providers.

17.2 Responsibilities of the Parties

- 17.2.1 U S WEST and AT&T agree to treat each other fairly, nondiscriminatorily, and equally for all items included in this Agreement, or related to the support of items included in this Agreement.
- 17.2.2 AT&T and U S WEST agree to exchange such reports and/or data as provided in this Agreement to facilitate the proper billing of traffic.
- 17.2.3 [Intentionally left blank for numbering consistency]
- 17.2.4 AT&T and US WEST shall share responsibility for all Control Office functions for Local Interconnection trunks and trunk groups, and both Parties shall share the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.
- 17.2.5 The Party that performs the End Office function is responsible for all Control Office functions for the meet point trunking arrangement trunks and trunk groups, and shall be responsible for the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.

#### 17.2.6 AT&T and U S WEST shall:

- 17.2.6.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.
- 17.2.6.2 Notify each other when there is any change affecting the service requested, including the due date.
- 17.2.6.3 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its Interconnection trunks/trunk groups are installed per the Interconnection order, meet agreed-upon acceptance test requirements, and are placed in service by the due date.
- 17.2.6.4 Perform sectionalization to determine if a trouble is located in its facility or its portion of the Interconnection trunks prior to referring the trouble to each other.
- 17.2.6.5 Advise each other's Control Office if there is an equipment failure which may affect the Interconnection trunks.
- 17.2.6.6 Provide each other with a trouble reporting/repair contact number that is readily accessible and available twenty-four (24) hours per day, seven (7) days per week. Any changes to this contact arrangement must be immediately provided to the other Party.
- 17.2.6.7 Provide to each other test-line numbers and access to test lines.

17.2.6.8 Cooperatively plan and implement coordinated repair procedures for the meet point and Local Interconnection trunks and facilities to ensure trouble reports are resolved in a timely and appropriate manner.

## 17.3 Types of Traffic

- 17.3.1 The types of traffic to be exchanged or provided under this Agreement include, but are not limited to, the following:
  - 17.3.1.1 EAS/Local Traffic,
  - 17.3.1.2 Transit Traffic,
  - 17.3.1.3 Switched Access Traffic,
  - 17.3.1.4 Ancillary traffic includes all traffic destined for Ancillary Services, or that may have special billing requirements, including, but not limited to, the following:
    - (a) Directory Assistance
    - (b) 911/E911
    - (c) Operator call termination (busy line interrupt and verify)
    - (d) 800/888 database dip
    - (e) LIDB
    - (f) Information services requiring special billing.
  - 17.3.1.5 Unless otherwise stated in this Agreement, ancillary traffic will be exchanged in accordance with whether the traffic is Local/EAS, intraLATA toll, or Switched Access.
- 17.4 Transport and Termination of Exchange Traffic
  - 17.4.1 Termination of Local Traffic

Local Traffic will be terminated pursuant to the Reciprocal Compensation described in Attachment 1.

#### 17.4.2 EAS/Local Traffic

As negotiated between the Parties, the exchange of local traffic between the Parties may occur in several ways.

- (a) While the Parties anticipate the use of two-way trunks for the delivery of Local Traffic, either Party may elect to provision its own one-way trunks for delivery of Local Traffic to be terminated on the other Party's network at the "initial" point of Interconnection;
- (b) The Parties may elect to purchase transport services from each other or from a third party. Such transport delivers the originating Party's Local Traffic to the terminating Party's end office or tandem for call termination. Transport may be

purchased as either tandern switched transport (which is included in the tandem call termination rate) or direct trunk transport;

(c) To the extent that AT&T has established a Collocation arrangement at a USWEST end office location, and has available capacity, the Parties agree that AT&T shall provide two-way direct trunk facilities, when required, from that end office to the AT&T switch. In all other cases, the direct facility may be provisioned by USWEST or AT&T or a third party. If both AT&T and USWEST desire to provision the facility and cannot otherwise agree, the Parties may agree to resolve the dispute through the submission of competitive bids.

#### 17.4.3 Transit Traffic

17.4.3.1 U S WEST will accept traffic originated by AT&T and will terminate it at a point of interconnection with another CLEC, Exchange Carrier, IXC or Wireless Carrier. U S WEST will provide this transit service through Tandem Office Switches. AT&T may also provide U S WEST with transit service.

17.4.3.2The Parties expect that all networks involved in transporting Transit Traffic will deliver calls to each involved network with CCS/SS7 protocol and the appropriate ISUP/TCAP message to facilitate full interoperability and billing functions. In all cases, the originating company is responsible to follow the EMR standard and to exchange records with both the transiting company and the terminating company, to facilitate the billing process to the originating network.

17.4.3.3The Parties will use industry standards developed to handle the provision and billing of Switched Access by multiple providers (MECAB, MECOD and the Parties' FCC tariffs).

#### 17.4.4 Toll Traffic

Toll Traffic routed to an access tandem, or directly routed to an end office, will be terminated as Switched Access Service.

## 17.5 Interface Code Availability And Optional Features

#### 17.5.1 Interface Code Availability

Supervisory Signaling specifications, and the applicable network channel interface codes for Local Interconnection trunks, are the same as those used for Feature Group D Switched Access Service, as described in the Parties' applicable Switched Access tariffs.

#### 17.5.2 Optional Features

## 17.5.2.1 Inband MF or SS7 Out of Band Signaling

Inband MF signaling and SS7 out of band signaling are available for local trunks. MF signaling or SS7 out-of-band signaling must be requested on the order for the new local trunks. Provisioning of the local trunks equipped with MF signaling or

SS7 out of band signaling is the same as that used for Feature Group D Switched Access. Common Channel Signaling Service, as described in this Agreement, must be ordered by AT&T when SS7 out-of-band signaling is requested on local trunks.

## 17.5.2.2 Clear Channel Capability

Clear channel capability permits 24 DS-0-64 kbit/s services or 1.536 Mbit/s of information on the 1.544 Mbit/s line rate. Clear channel capability is available for local trunks equipped with SS7 out-of-band signaling. Clear channel capability is only available on trunks to U S WEST's access tandem switch or U S WEST's end office switches (where available). Clear channel capability must be requested on the order for the new local trunks. The provisioning of the local trunks equipped with clear channel capability is the same as that used for Feature Group D Switched Access Service. U S WEST will provide AT&T with a listing of U S WEST end offices, local tandems and access tandems equipped with clear channel capability. (Clear channel capability is not available on trunks to U S WEST's local tandem switches or end offices where it is currently not deployed. AT&T agrees to use the Bona Fide Request process to request clear channel capability for such additional switches. Prices for such additional clear channel capability, if any, will be established through the BFR process).

#### 17.6 Measuring Local Interconnection Minutes

- 17.6.1 Measurement of terminating Local Interconnection minutes, as calculated per Attachment 5, begins when the terminating local entry switch receives answer supervision from the called end user's end office indicating the called end user has answered. The measurement of terminating call usage over local trunks ends when the terminating local entry switch receives disconnect supervision from either the called end user's end office, indicating the called end user has disconnected, or AT&T's Point of Interconnection, whichever is recognized first by the entry switch.
- 17.6.2 U S WEST and AT&T are required to provide each other the proper call information (e.g., originated call party number and destination call party number, etc.) to enable each Party to issue bills in a complete and timely fashion.

#### 17.7 Testing

#### 17.7.1 Acceptance Testing

At the time of installation of a local trunk group, and at no additional charge, the Parties will cooperatively test the same parameters tested for terminating Feature Group D Switched Access Service.

## 17.7.2 Testing Capabilities

17.7.2.1 Terminating Local Interconnection trunk testing is provided where equipment is available, with the following test lines: seven-digit access to balance (100 type), milliwatt (102 type), nonsynchronous or synchronous, automatic transmission measuring (105 type), data transmission (107

type), loop-around, short circuit, open circuit, and non-inverting digital loopback (108 type).

17.7.2.2 In addition to Local Interconnection trunk acceptance testing, other tests are available (e.g., additional cooperative acceptance testing, automatic scheduled testing, cooperative scheduled testing, manual scheduled testing, and non-scheduled testing) at the applicable tariff rates.

## 17.10. Mileage Measurement

Where required, the mileage measurement for Local Interconnection facilities and trunks is determined in the same manner as the mileage measurement for Feature Group D Switched Access Service.

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## 1. General Business Requirements

#### 1.1 Procedures

#### 1.1.1 US WEST Contact with Subscribers

- 1.1.1.1 AT&T at all times shall be the primary contact and account control for all interactions with its subscribers, except as specified by AT&T. AT&T subscribers include active Customers as well as those for whom service orders are pending.
- 1.1.1.2 USWEST shall ensure that any USWEST personnel who may receive customer inquiries, or otherwise have opportunity for subscriber contact: (a) provide appropriate referrals and telephone numbers to subscribers who inquire about AT&T services or products; (b) do not in any way disparage AT&T or its products or services during such inquiry or subscriber contact; and (c) do not provide information about USWEST products or services during that same inquiry or subscriber contact.
- 1.1.1.3 AT&T shall ensure that any AT&T personnel who may receive customer inquiries, or otherwise have opportunity for subscriber contact: (a) provide appropriate referrals and telephone numbers to subscribers who inquire about U S WEST services or products; (b) do not in any way disparage U S WEST or its products or services during such inquiry or subscriber contact; and (c) do not provide information about AT&T products or services during that same inquiry or subscriber contact.
- 1.1.1.4 U S WEST shall not use AT&T's request for subscriber information, order submission or any other aspect of AT&T's processes or services to aid U S WEST's marketing or sales efforts.

#### 1.1.2 Expedite, Escalation and Disaster Procedures

- 1.1.2.1 No later than sixty (60) days after the Effective Date of this Agreement, USWEST and AT&T shall develop mutually acceptable escalation and expedite procedures which may be invoked at any point in the Service Ordering, Provisioning, Maintenance and Subscriber Usage Data transfer processes to facilitate rapid and timely resolution of disputes. Within the said sixty (60) day period, USWEST and AT&T will establish intercompany contact lists for purposes of handling subscriber and other matters which require attention/resolution outside of normal business procedures. To the extent possible, USWEST shall notify AT&T of any changes to its escalation contact list at least one (1) week before such changes are effective.
- 1.1.2.2 No later than sixty (60) days after the Effective Date of this Agreement, U S WEST and AT&T shall jointly establish contingency and disaster recovery plans for those cases in which normal service ordering, provisioning, maintenance, billing and other procedures for U S WEST's unbundled Network Elements, features, functions and Resale Services are inoperable.

## 1.1.3 Operational and Technological Changes

- 1.1.3.1 US WEST shall notify AT&T of any material operational or technological (e.g., network, systems interfaces) changes related to any services, Interconnection methods, or Network Elements purchased by AT&T. At the time US WEST decides to make such a change, US WEST will notify AT&T in sufficient time to allow AT&T to make necessary adjustments to accommodate the change, but in no case with less than thirty (30) days' notice, unless otherwise agreed to by the Parties. Objections to the proposed change must be given in writing to US WEST in a reasonable time. For the purposes of this Section, material changes shall be defined as those changes which will likely impact current interactions between AT&T (or its customers) and US WEST.
- 1.1.3.2 U S WEST agrees to notify AT&T whenever an AT&T subscriber who is provided local service through Services for Resale, INP/NP, or unbundled Network Elements changes AT&T PIC status.

#### 1.1.4 Customer of Record

1.1.4.1 Providing AT&T has obtained proper customer authorization, U S WEST shall recognize AT&T as the Customer of Record for all Network Elements or Services for Resale ordered by AT&T and shall send all notices, invoices, and information which pertain to such ordered services directly to AT&T. AT&T will provide U S WEST with addresses to which U S WEST shall send all such notices, invoices, and information.

#### 1.1.5 Work Center Interface Procedures

1.1.5.1 U S WEST and AT&T shall, within ninety (90) days of the Effective Date of this Agreement, develop and implement work center interface procedures for each function/ business process necessary for fulfilling the terms of this Agreement.

#### 1.2 Service Offerings

#### 1.2.1 Changes in Retail Service Offerings

- 1.2.1.1 Pursuant to Section 23.2 of Part A of this Agreement, U S WEST shall provide summaries to AT&T describing the proposed change(s) of services which are available for resale pursuant to this Agreement.
- 1.2.1.2 [Intentionally left blank for numbering consistency]
- 1.2.1.3 U S WEST shall provide AT&T with access to new services, features, and functions concurrent with U S WEST's notice to AT&T of such changes, so that AT&T may evaluate these services.

#### 1.2.2 Essential Services

1.2.2.1 U S WEST shall designate trunks or lines as an Essential Service Line (ESL) or Telecommunications Service Priority (TSP), whichever is applicable, upon AT&T's request, based on industry standards.

#### 1.2.3 Blocking Services

1.2.3.1 Upon request from AT&T, U S WEST shall provide blocking in accordance with U S WEST standard intervals for 700, 900, and 976 services, or other services of similar type as may now exist or may be developed in the future according to industry standards, and shall provide Billed Number Screening ("BNS"), including required LIDB updates, or equivalent service for blocking completion of bill-to-third party and collect calls, on a line, trunk, or individual service basis.

## 1.2.4 Training Support

- 1.2.4.1 U S WEST will train its employees who may communicate with AT&T subscribers to treat AT&T in a nondiscriminatory manner. U S WEST will solicit and may take into account input from AT&T in the development of such training and will permit AT&T to review, but not approve, such training. Such training will comply with the branding requirements of this Agreement.
- 1.2.4.2 U S WEST or its agent shall train AT&T employees on U S WEST's systems and processes necessary to assure the accuracy of required information exchange between AT&T. Information/materials provided to AT&T should include, at a minimum, operational and procedural information, and U S WEST-specific system access/interface instruction for performing similar functions.

#### 1.2.5 Carrier Identification Codes

U S WEST shall provide to AT&T the active Carrier Identification Codes (CIC) for both Dial 1 and toll free (e.g., 800, 888) services for each of its access tandems pursuant to industry guidelines.

#### 2. Pre-Ordering

## 2.1 General Business Requirements

#### 2.1.1 Street Address Guide (SAG)

Within sixty (60) days after the Effective Date of this Agreement, USWEST shall provide to AT&T the SAG data, in an electronic format, when available, or otherwise as mutually agreed. All changes to the SAG shall be provided to AT&T on a weekly basis.

#### 2.1.2 CLASS and Custom Features

2.1.2.1 AT&T may order the entire set of CLASS and Custom features and functions, or a subset of any one or any combination of such features. In addition, U S WEST shall provide AT&T with a list of features and functions available on an end office by end office basis.

## 2.1.3 Customer Payment History

2.1.3.1 AT&T and U S WEST agree to make available to a mutually agreed upon thirdparty credit reporting agency, on a timely basis, such of the following Customer payment history information available for each person or entity that applies for local service or intraLATA toll Telecommunications Service(s) from either Party.

- 2.1.3.1.1 Applicant's name;
- 2.1.3.1.2 Applicant's address;
- 2.1.3.1.3 Applicant's previous phone number, if any,
- 2.1.3.1.4 Amount, if any, of unpaid balance in applicant's name;
- 2.1.3.1.5 Whether applicant is delinquent on payments;
- 2.1.3.1.6 Length of service with prior local or intraLATA toll provider;
- 2.1.3.1.7 Whether applicant had local or intraLATA toll service terminated or suspended within the last six (6) months with an explanation of the reason therefor, and,
- 2.1.3.1.8 Whether applicant was required by prior local or intraLATA toll provider to pay a deposit or provide another form of security, including the amount of each.
- 2.1.3.2 Such information shall be provided on the condition that the credit reporting agency only make such information available to the carrier to which the person or entity in question has applied for Telecommunication Service(s).

#### 2.1.4 Number Administration/Number Reservations

- 2.1.4.1 Until Number Administration functions are assumed by a neutral third party in accordance with FCC rules and regulations, U S WEST shall assign NXXs to AT&T on a non-discriminatory and equivalent basis following NANP guidelines. In addition, U S WEST shall provide testing and loading of AT&T's NXX on the same basis as U S WEST provides itself or its Affiliates. Further, in U S WEST's role as number administrator, it shall provide AT&T with access to abbreviated dialing codes, access arrangements for 555 line numbers, and the ability to obtain telephone numbers, including vanity numbers, while a customer is on the phone with AT&T. U S WEST shall provide the same range of number choices to AT&T, including choice of exchange number, as U S WEST provides its own customers. Reservation and aging of numbers shall remain U S WEST's responsibility.
- 2.1.4.2 AT&T may reserve blocks of U S WEST telephone numbers in accordance with U S WEST's tariffs, or in the same manner U S WEST reserves telephone numbers for its own use.
- 2.1.4.3 Where AT&T has obtained its own NXX, but has purchased U S WEST Services for Resale or Network Elements, U S WEST agrees to recognize the AT&T NXX in U S WEST's switch according to the local calling area defined by AT&T and approved by the Commission.
- 2.1.4.4 For resale and the unbundled switching element, U S WEST shall accept AT&T orders for vanity numbers and blocks of numbers for use with complex services including, but not limited to, DID, CENTREX, and hunting arrangements, as requested by AT&T on a non-discriminatory, equivalent basis following NANP guidelines.
- 2.1.4.5 For simple services, U S WEST shall provide real-time electronic interfaces to AT&T to obtain telephone number confirmation while the customer is on the

line. When real time electronic interfaces are not available for simple services number reservations, USWEST shall provide alternative means for confirmation of the number reservation while the customer is on the line. For number reservations associated with complex services, USWEST shall provide confirmation of the number reservation within forty-eight (48) hours of AT&T's request or within such time as USWEST may provide to itself or Affiliates, whichever is less.

#### 2.1.4.6 Number Resources Arrangements

- 2.1.4.6.1 Nothing in this Agreement shall be construed in any manner to limit or otherwise adversely impact either Party's right to the request and assignment of any NANP number resources including, but not limited to, central office (NXX) codes pursuant to the Central Office Code Assignment Guidelines (last published by the Industry Numbering Committee ("INC") as INC 95-0407-008, Revision 4/19/96, formerly ICCF 93-0729-010).
- 2.1.4.6.2 To the extent USWEST serves as Central Office Code Administrator for a given region, USWEST will support all AT&T requests related to central office code (NXX) administration and assignments in the manner required and consistent with the Central Office Code Assignment Guidelines.
- 2.1.4.6.3 [Intentionally left blank for numbering consistency]
- 2.1.4.6.4 The Parties will comply with (NXX) administration requirements as prescribed by the FCC, the Commission, and accepted industry guidelines.
- 2.1.4.6.5 It shall be the responsibility of each Party to program and update its own switches and network systems pursuant to the Local Exchange Routing Guide ("LERG") guidelines to recognize and route traffic to the other Party's assigned NXX codes at all times. Neither Party shall impose any fees or charges whatsoever on the other Party for such activities. The Parties will cooperate to establish procedures to ensure the timely activation of NXX assignments in their respective networks.
- 2.1.4.6.6 Each Party shall be responsible for notifying its customers of any changes in numbering or dialing arrangements to include changes such as the introduction of new NPAs or new NXX codes.
- 2.1.4.6.7 Until an impartial entity is appointed to administer telecommunications numbering, U S WEST will assign NXX codes to AT&T in accordance with national guidelines at no charge and on a nondiscriminatory basis.
- 2.1.4.6.8 Each Party is responsible for administering NXX codes assigned to it. Each Party is responsible for obtaining LERG listings of CLLI codes assigned to its switches. Each Party shall use the LERG published by Bellcore or its successor for obtaining routing information and shall provide all required information to Bellcore for maintaining the LERG in a timely manner.

- 2.1.4.7 U S WEST shall provide provisioning support outside of scheduled work hours on a nondiscriminatory exception basis as requested by AT&T. Such support may be subject to a minimum labor charge.
- 2.1.4.8 Service Assurance Warranties and Incentives: U S WEST shall provide to AT&T service assurance warranties and incentives as U S WEST provides such service warranties and incentives to its own end users or any other Person except as otherwise provided by the Commission.
- 2.1.4.9 Availability of Network Capacity: Consistent with AT&T's forecasts, U S WEST shall deploy and keep deployed network facilities for AT&T services in a non-discriminatory manner and in the same manner as U S WEST makes such facilities available to itself for its services.
- 2.1.4.10Workcenter Interface Methods and Procedures: U S WEST and AT&T shall finalize interface methods and procedures between their respective work centers detailing systems and processes for ordering and provisioning. Such methods and procedures shall be completed within one hundred twenty (120) days after a written request by either Party. The lack of workcenter interface methods and procedures shall not inhibit the provision of services under this Agreement.

## 2.2 Service Order Process Requirements

- 2.2.1 [Intentionally left blank for numbering consistency]
- 2.2.2 Specific Unbundling Requirements
  - 2.2.2.1 When ordering a Combination, AT&T shall have the option of ordering all features, functions and capabilities of each Network Element.
  - 2.2.2.2 When AT&T orders Network Elements, U S WEST shall provision all features, functions, and capabilities appropriate to the Network Elements which may include, but are not limited to:
    - 2.2.2.2.1 the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to USWEST's Customers, such as telephone number, white page listing, and dial tone; and
    - 2.2.2.2.2 all other features the switch has activated, including, but not limited to, custom calling, custom local area signaling service features and Centrex, as well as any technically feasible customized routing functions provided by the switch.

## 2.3 Systems Interfaces and Information Exchanges

## 2.3.1 General Requirements

[Intentionally left blank for numbering consistency]

- 2.3.2 Pre-Ordering and Provisioning for Resale Services and Unbundled Network Elements
  - 2.3.2.1 US WEST shall provide to AT&T a list of all intraLATA and interLATA carriers available for Customer selection on a central office level.
  - 2.3.2.2 [Intentionally left blank for numbering consistency].
  - 2.3.2.3 U S WEST shall provide AT&T with access to Customer Profile Information ("CPI") without requiring AT&T to produce a signed Letter of Authorization ("LOA") subject to proof of authorization requirements described elsewhere in this Agreement, based on AT&T's blanket representation that the Customer has authorized AT&T to obtain such CPI.
    - 2.3.2.3.1 CPI shall be in a mutually agreed to format at the line and/or trunk level. U S WEST shall provide to AT&T a real-time, electronic interface to U S WEST Customer information systems which will allow AT&T to obtain the Customer profile, which may include, but not be limited to, Customer name, service addresses, billed telephone number(s), and identification of features and services provided by U S WEST on the Customer accounts, and to obtain information on all features and services available in the end office where Customer's services are currently provisioned. The preceding information may not include services deemed not to be Telecommunications Services by the Commission.
      - 2.3.2.3.1.1 Until access is available via a real-time, electronic interface for CPI, U S WEST agrees that AT&T can obtain CPI in an interim mutually agreed to manner and in accordance with Section 3.2 of this Attachment to facilitate the service order process.
  - 2.3.2.5 U S WEST shall provide to AT&T, upon request, a list of all current features and functions technically available from each switch, by switch CLLI. Planned services shall be provided to AT&T at least thirty (30) days in advance of their availability.
  - 2.3.2.6 I[Intentionally left blank for numbering consistency]
  - 2.3.2.7 Pending or Held Orders: U S WEST shall provide, when available, the AT&T information regarding a subscriber's previous pending or held orders. If the subscriber has a pending or held order, the status of the order shall not be negatively impacted as a result of the subscriber changing local service providers (i.e., due date for pending service changed to later date).
  - 2.3.2.8 Special Construction: When U S WEST determines that special construction is required, U S WEST shall notify AT&T on a timely basis of special construction requirements and charges, and obtain AT&T authorization before beginning such construction.

## 2.3.3 Pre-Ordering and Provisioning for Unbundling

- 2.3.3.1 U S WEST shall provide to AT&T, upon reasonable request, sufficient engineering design and layout information for Network Elements for specific applications.
- 2.3.3.2 US WEST shall provide to AT&T, upon request, advance information of the details and requirements for planning and implementing NPA splits in accordance with NANP Guidelines.
- 2.3.3.3 U S WEST shall make engineering support available to AT&T as is normal and customary in the provision of Telecommunications Services, Network Elements, Combinations or Ancillary Functions as described in this Agreement. AT&T may request additional engineering support.

## 2.4 Pre-ordering Functions<sup>1</sup>

"Pre-Ordering" and "Ordering" encompass the preliminary set of activities whereby a service representative interacts with the customer in order to obtain the information required to write a service order and consist of the following functions: verify an address, check service availability, reserve a telephone number, check for appointment availability, reserve an appointment and return customer service information. These functions are described as follows:

- 2.4.1 Address Verification Provides AT&T with the ability to query for and receive the customer service location, serving central office, and facility indicators. The facilities indicator will indicate the availability of facilities for one (1) access line at the address, if the cable pair is available or working. If the cable pair is working, an indication of a pending disconnect order and the due date will be provided. This function does not reserve cable pairs.
- 2.4.2 Telephone Number Reservation Provides AT&T with the capability to identify if one or more telephone numbers are available and reserve them if available. This includes the ability to reserve one or more specific numbers (vanity numbers), a block of sequential or random block of numbers by serving central office and/or NXX. If a work order is not received within a negotiated amount of time, the reservation will automatically expire.
- 2.4.3 Appointment Availability and Reservation Provides AT&T with the capability to determine the next available due date, the availability of a specific date, an indication if the date is available or a selection of the next available date, any closed dates beyond that date, and reservation of an available appointment.
- 2.4.4 Service Availability Allows AT&T to determine the availability of services and facilities to a specific end-users' location(s). This capability indicates that the service is available, that tariff rates apply, the amounts of any additional recurring and non-recurring costs, and the interval to be used when ordering the service.

MCIm Order, pp. 15-16 at Issue 24 and AT&T Order at Issue 41.

- 2.4.5 Customer Service Information Request Gives AT&T the ability to request a listing of existing services, features, directory listing and equipment for a customer account.
- 2.4.6 Circuit Identification Request Provides AT&T with the capability to identify and obtain circuit identifications. If a work order for a Circuit Identification Request is not received within a negotiated amount of time, the request will automatically expire.

## 3. Ordering and Provisioning

## 3.1 General Business Requirements

## 3.1.1 Ordering and Provisioning Parity

USWEST shall provide AT&T with the same level of ordering and provisioning support as USWEST provides itself in accordance with standards and performance measurements that USWEST uses and/or which are required by law, regulatory agency, or by USWEST's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including, but not limited to, such new architecture, equipment, facilities, and interfaces as USWEST may deploy) that USWEST provides to AT&T under this Agreement.

## 3.1.2 Interconnection Service Center (ISC)/Single Point of Contact

- 3.1.2.1 U S WEST shall provide a Systems Interface Help Desk or equivalent which shall serve for all activities involved in the electronic interface for ordering and provisioning of U S WEST's unbundled Network Elements, features, functions, and Resale Services. The Systems Interface Help Desk or equivalent shall be available twenty-four (24) hours a day, seven (7) days a week.
- 3.1.2.2 U S WEST shall provide a Single Point of Contact ("SPOC") and shall provide to AT&T toll-free nationwide telephone numbers (available during U S WEST's scheduled work hours) answered by competent, knowledgeable personnel, trained to answer questions and resolve problems in connection with the ordering and provisioning of unbundled Network Elements, features, functions, capabilities, and Resale Services. U S WEST will provide sufficient resources to provide equivalent, or as otherwise agreed to by the Parties, service to AT&T.
- 3.1.2.3 In addition to the electronic interfaces provided for elsewhere in this Agreement, U S WEST shall provide, as requested by AT&T through the SPOC, provisioning and dispatch in the form of coordinated scheduling, status, and dispatch capabilities equivalent to that which U S WEST provides itself or as otherwise agreed to by the Parties.

## 3.1.3 Carrier Selection

3.1.3.1 For Services for Resale or unbundled Network Elements, USWEST shall provide to AT&T, no later than January 1, 1997, the capability to order local

service, intraLATA and interLATA toll services by entering AT&T subscriber's choice of carrier on a single order. U S WEST will offer other carrier selection choices as they become available. U S WEST shall provide AT&T with the capability to order separate interLATA and intraLATA carriers on a line or trunk basis where 1+ presubscription is available.

3.1.3.2 Where intraLATA 1+ presubscription is not available, or if the subscriber does not select an intraLATA toll carrier, U S WEST agrees to provide intraLATA toll services for resale to AT&T and to recognize the end user as the customer of AT&T for intraLATA toll. AT&T shall designate the default carrier for all other toll calls if the subscriber does not select a carrier. In all cases, U S WEST will route toll calls to the appropriate carrier as designated by AT&T.

### 3.1.4 Notification to Long Distance Carrier

- 3.1.4.1 US WEST will not accept PIC change requests through the CARE process for AT&T local service customers. AT&T's long distance operations may obtain such CARE transactions for AT&T long distance customers from the customer's local service provider. US WEST agrees to notify IXCs using OBF approved CARE transactions, whenever an IXC Customer who is provided local service through Services for Resale, INP/NP, or unbundled Network Elements changes PIC status.
- 3.1.4.2 U S WEST shall implement new Transaction Code Status Indicators (TCSIs) 2033, 2233, 3147, and 3148. The new local service provider identification ("LSPID") will be included on these transactions if the new local service provider agrees U S WEST should provide the information to a long distance provider as defined by the OBF in support of Local Resale.
- 3.1.4.3 U S WEST shall implement TCSIs used in conjunction with the new local service provider ("LSP") identification code for handling account maintenance, customer service, and trouble administration issues. These TCSIs include 4001/02/05, 4201-4205, 4301, 2033, 2233, 3147, 3148, 3149, and others as the OBF may define.
  - 3.1.4.3.1 In addition, U S WEST shall implement TCSIs, when available, used in conjunction with the new Ported Telephone Number field to link "shadow" and ported telephone numbers in support of Interim Number Portability. These TCSIs include 2231, 3150, 3151, and others as the OBF may define.

## 3.1.5 Ordering Interconnection

The Parties agree to utilize the OBF-ASR process for ordering interconnection trunks, which is the same process used to order Access Services. When the ordering Party requests facilities, routing, or optional features different than those determined to be available, the Parties will work cooperatively in determining an acceptable configuration based on available facilities, equipment and routing plans.

## 3.2 Service Order Process Requirements

## 3.2.1 OBF Compliance

3.2.1.1 U S WEST and AT&T shall generally follow the OBF-developed ordering and provisioning process guidelines. These processes include, but are not limited to, pre-order service inquiry, pre-order service inquiry response, firm order, acknowledgment/rejection, firm order confirmation, delay notification, and completion notification. U S WEST agrees to work cooperatively to generally comply with future OBF developed guidelines.

## 3.2.2 Service Migrations and New Customer Additions

- 3.2.2.1 For Resale Services, U S WEST shall not require a disconnect order from a Customer, another local service provider, or any other entity, to process an AT&T order to establish AT&T Local Service and/or migrate a Customer to AT&T Local Service.
- 3.2.2.2 For Resale Services, U S WEST shall not disconnect any Customer service or existing features available under this Agreement at any time during the migration of that Customer to AT&T service without AT&T's prior agreement.
- 3.2.2.3 For services provided through unbundled Network Elements, U S WEST shall recognize AT&T as an agent for the Customer in coordinating the disconnection of services provided by another CLEC or U S WEST.
- 3.2.2.4 Unless otherwise directed by AT&T, when AT&T orders Resale Services or Network Elements, all trunk or telephone numbers currently associated with existing services shall be retained without loss of feature capability and without loss of associated ancillary services including, but not limited to, Directory Assistance and 911/E911 capability for those services or features which U S WEST controls and which are available under this Agreement.
- 3.2.2.5 For Customer conversions requiring coordinated cut-over activities, U S WEST and AT&T will agree on a scheduled conversion time(s), which will be a designated two-hour time period within a designated date. Unless expedited, U S WEST and AT&T shall schedule the cut-over window at least forty-eight (48) hours in advance, and as part of the scheduling, U S WEST shall estimate for AT&T the duration of any service interruption that the cut-over might cause. The cut-over time will be defined as a thirty (30) minute

MCIm Order, p. 10 at Issue 13.

window within which both the AT&T and USWEST personnel will make telephone contact to complete the cut-over.

- 3.2.2.5.1 U S WEST will coordinate activities of all U S WEST work groups involved with the conversion. This coordination will include, but not be limited to, work centers charged with manual cross-connects, electronic cross-connect mapping, and switch translations (including, but not limited to, implementation of Interim Number Portability translations).
- 3.2.2.5.2 As soon as possible, but in no event later than one (1) hour after completion, U S WEST will notify AT&T when coordinated cut-over is complete.
- 3.2.2.5.3 End user service interruption shall not exceed twenty (20) minutes during any cut-over. The average interruption caused by the cut-over of AT&T Customers shall not exceed ten (10) minutes. If any service interruption is to exceed twenty (20) minutes, however, USWEST will immediately notify AT&T of such delay.
- 3.2.2.5.4 Within the appointed thirty (30) minute cut-over time, the US WEST personnel will call the AT&T personnel designated to perform crossconnection work and when the USWEST person is reached in that interval such work will be promptly performed. If the AT&T person is not ready within the appointed interval, and if AT&T had not called to reschedule the work at least two (2) hours prior to the start of the interval, USWEST and AT&T will reschedule the work order and AT&T will pay the non-recurring installation charge for the unbundled loops scheduled for the missed appointment. In addition, non-recurring installation charges for the rescheduled appointment will apply. If the US WEST person is not available or not ready at any time during the thirty (30) minute interval, AT&T and USWEST will reschedule and USWEST will waive the non-recurring charge for the unbundled loops scheduled for that interval. If unusual or unexpected circumstances prolong or extend the time required to accomplish the coordinated cut-over, the Party responsible for such circumstances is responsible for the reasonable labor charges of the other Party. Delays caused by the customer are the responsibility of AT&T. In addition, if AT&T has ordered INP as a part of the unbundled loop installation, USWEST will coordinate implementation of INP with the unbundled loop installation.
- 3.2.2.6 Service Order: U S WEST shall provide AT&T the capability to issue a service order for unbundled Network Elements, Combinations, and Resale Services.
- 3.2.2.7 PLOC Changes: U S WEST shall provide AT&T the capability to transfer a customer with no feature changes to AT&T through a streamlined PLOC (Primary Local Carrier) transfer process.
- 3.2.2.8 Status: U S WEST shall provide the AT&T status on a service order when the status of the order changes.
- 3.2.2.9 Modifies: U S WEST shall provide AT&T the capability to modify the service order any time after it has been issued; however, U S WEST may require the issuance of a supplemental or change order.

- 3.2.2.10 Cancel: U S WEST shall provide AT&T the capability to cancel the service order any time after it has been issued.
- 3.2.2.11 Coordinated Service Orders: US WEST shall provide AT&T the capability to relate coordinated services orders, and identify those service orders that require coordination with AT&T, or the subscriber, or the subscriber's vendor. When so identified, US WEST will follow any specific instructions indicated on the service order so that the subscriber's service is not negatively affected by the service turn-up activity.
- 3.2.2.12 Expedite Process: U S WEST and AT&T shall mutually develop expedite procedures to be followed when AT&T determines an expedite is required to meet subscriber service needs.
- 3.2.2.13 Expedites: U S WEST shall provide AT&T the capability to expedite a service order. Within two (2) business hours after a request from AT&T for an expedited order, U S WEST shall notify AT&T of U S WEST's confirmation to complete, or not complete, the order within the expedited interval.

## 3.2.3 Intercept Treatment and Transfer of Service Announcements

- 3.2.3.1 US WEST shall provide unbranded intercept treatment and transfer of service announcements to AT&T Customers. US WEST shall provide such treatment and transfer of service announcement for all service disconnects, suspensions, or transfers, in the same manner as that which US WEST provides to its own end users. US WEST's current standard time periods for providing such announcements is three (3) months for residential service and twelve (12) months for business service. AT&T may request extensions at parity with that which US WEST provides to its end-users.
- 3.2.3.2 Pursuant to this Agreement, AT&T shall provide unbranded intercept treatment and transfer of service announcements to U S WEST Customers. AT&T shall provide such treatment and transfer of service announcement for all service disconnects, suspensions, or transfers, at parity with that which AT&T provides its own end users. AT&T standard time periods for providing such announcements is three (3) months for residential service and twelve (12) months for business service. U S WEST may request extensions at parity with that which AT&T provides to its end-users.

#### 3.2.4 Due Date

- 3.2.4.1 U S WEST and AT&T shall mutually agree on what services and circumstances are subject to the standard interval process to determine the due date or the requested/committed due date process.
- 3.2.4.2 For those services and circumstances that U S WEST and AT&T agree shall be handled by the standard interval process, U S WEST shall supply AT&T with standard due date intervals on a nondiscriminatory basis to be used by AT&T personnel to determine service installation dates. Under those circumstances U S WEST shall complete the provisioning within the standard interval.

3.2.4.2.1 If AT&T requests a due date earlier than the standard due date interval, then expedite charges may apply.

3.2.4.3 For those services and circumstances that U S WEST and AT&T agree shall be handled by the requested/committed due date process, AT&T may request a due date on each order. U S WEST will provide an offered due date on a nondiscriminatory basis. If AT&T accepts the offered due date then such date shall become the committed due date. U S WEST will complete the order on the committed due date unless otherwise authorized by AT&T.

3.2.4.3.1 If AT&T requires a due date earlier than the U S WEST offered due date and U S WEST agrees to meet the AT&T required due date, then that required due date becomes the committed due date and expedite charges may apply.

- 3.2.4.4 Subsequent to an initial order submission, AT&T may request a new/revised due date that is earlier than the committed due date. If U S WEST agrees to meet that new/revised due date, then that new/revised due date becomes the committed due date and expedite charges may apply.
- 3.2.4.5 Any special or preferred scheduling options available, internally or externally, to U S WEST for ordering and provisioning services shall also be available to AT&T.

#### 3.2.5 Customer Premises Inspections and Installations

- 3.2.5.1 AT&T shall perform or contract for all needs assessments, including equipment and installation requirements, at the Customer premises.
- 3.2.5.2 U S WEST shall provide AT&T with the ability to schedule dispatches for work under this Agreement.
- 3.2.5.3 U S WEST shall provide, at AT&T's request, extended demarcation beyond the NID using intrabuilding riser and lateral beyond the NID. This provision shall not require U S WEST to provide inside wire.

## 3.2.6 Firm Order Confirmation (FOC)

- 3.2.6.1 U S WEST shall provide to AT&T, via an electronic interface, a Firm Order Confirmation ("FOC") for each AT&T order. The FOC shall contain, on a per line and/or trunk basis, an enumeration of AT&T ordered unbundled Network Elements (and the specific U S WEST naming convention applied to that Network Element or Combination), features, functions, Resale Services, options, physical interconnection, quantity, and U S WEST committed due date for order completion.
- 3.2.6.2 For a revised FOC, U S WEST shall provide order detail on a per line or per trunk level basis, as well as the order detail from the prior FOC.

#### 3.2.7 Order Rejections

- 3.2.7.1 USWEST shall reject and return to AT&T any order that USWEST cannot provision, due to technical reasons, missing information, or jeopardy conditions in accordance with Performance Measurements as defined herein. When an order is rejected, USWEST shall, in its rejection notification, specifically describe all of the reasons for which the order was rejected. USWEST shall not reject any orders on account of the requested due date.
- 3.2.7.2 On an exception basis, to the extent that errors cannot be corrected pursuant to electronic interface processes, U S WEST agrees to accept verbal order corrections from AT&T. U S WEST shall timely inform AT&T by telephone of any minor issues which can be handled over the phone: As required, AT&T will provide a supplemental order reflecting changes to the original service order.

## 3.2.8 Service Order Changes

- If an installation or other AT&T-ordered work request requires a change from the original AT&T service order in any manner, U S WEST shall call AT&T in advance of performing the installation or other work to obtain authorization. U S WEST shall then provide AT&T an estimate of additional labor hours and/or materials. After all installation or other work is completed, U S WEST shall notify AT&T of actual labor hours and/or materials used in accordance with regular service order completion schedules.
  - 3.2.8.1.1 If additional work is completed on a service order, as approved by AT&T, the cost of the additional work must be reported to AT&T in accordance with regular service order completion schedules.
  - 3.2.8.1.2 If a service order is partially completed, notification must identify the work that was done and the work remaining to be completed.
- 3.2.8.2 If an AT&T Customer requests a service change at the time of installation or other work being performed by USWEST on behalf of AT&T, USWEST, while at the Customer premises, shall direct the AT&T Customer to contact AT&T so as to avoid unnecessary delays in service activation should the USWEST representative leave Customer premises prior to completing the installation.

#### 3.2.9 Jeopardy Situations

3.2.9.1 To the extent jeopardy information is available, U S WEST shall provide to AT&T notification of any jeopardy situations prior to the committed due date, missed appointments and any other delay or problem in completing work specified on AT&T service order as detailed on the FOC, in accordance with the Performance Measurements as defined herein.

## 3.2.10 Cooperative Testing

#### 3.2.10.1 Network Testing

3.2.10.1.1 To the extent that U S WEST provides testing for services offered to its end users and to the extent U S WEST provides testing for itself, U S WEST shall perform all pre-service testing prior to the completion of the AT&T order, including testing on local service facilities and switch translations, including, but not limited to, verification of features, functions, and services ordered by AT&T.

3.2.10.1.2 The Parties agree to cooperate in testing that is required to complete service orders.

#### 3.2.10.2 Systems and Process Testing

3.2.10.2.1 Upon AT&T's request, U S WEST shall cooperate with AT&T to ensure that all operational interfaces and processes are in place and functioning properly and efficiently. Testing shall simulate actual operational procedures and systems interfaces to the greatest extent possible. AT&T may request cooperative testing to ensure service performance, reliability, and Customer service ability.

#### 3.2.11 Service Suspensions/Restorations

3.2.11.1For services other than non-switched, upon AT&T's request through a Suspend/Restore Order, USWEST shall suspend or restore the functionality of any Network Element, feature, function, or Resale Service. USWEST shall provide restoration priority on a per Network Element or Combination basis in a manner that conforms with AT&T requested priorities and any applicable regulatory rules and regulations or government requirements.

#### 3.2.12 Disconnects

3.2.12.1U S WEST shall provide to AT&T daily information, in a mutually agreed upon format, notifying AT&T of any services disconnected from AT&T. This report will itemize a change in local service provider or outward line movement on service order activity.

## 3.2.13 Order Completion Notification

3.2.13.1 Upon completion of a service order by U S WEST in its system(s), U S WEST shall submit to AT&T an order completion which details the work performed (including a list of features and functions installed), the date completed, charges associated with the order, and verification of accurate service completion. Notification shall be provided in accordance with mutually agreed upon intervals.

3.2.14 [Intentionally left blank for numbering consistency.]

## 3.2.15 Specific Unbundling Requirements

- 3.2.15.1AT&T may order and US WEST shall provision unbundled Network Elements either individually or in any combination on a single order. AT&T may order and US WEST shall provide Unbundled Network Elements without restriction as to how those elements may be rebundled.<sup>3</sup>
- 3.2.15.2 Prior to providing service in a specific geographic area or when AT&T requires a change of network configuration, AT&T may elect to place an order with U S WEST requiring U S WEST to prepare Network Elements and switch translations in advance of orders for additional Network Elements from AT&T.
- 3.2.15.3 When AT&T orders combinations of currently connected Network Elements, U S WEST shall ensure that such Network Elements remain connected and functional without any disconnection or disruption.
- 3.2.15.4Order combinations of contiguous Network Elements shall be available to be ordered (a) on a case-by-case basis for those Network Elements that are Customer-specific; or (b) on a common-use (non-end user specific) basis for those Network Elements that are shared by multiple Customers.
- 3.2.15.5 Individual Network Elements shall be identified and ordered by AT&T so that they can be provisioned together.
- 3.2.15.6U SWEST shall provide technical assistance to AT&T with respect to unbundled Network Elements pursuant to Section 2.3.3.3 of this Attachment.
- 3.2.15.7 Each order for Network Elements will contain administration, bill, contact, and Customer information, as defined by the OBF.
- 3.2.15.8When ordering unbundled switch ports, AT&T is requested to specify the desired signaling (e.g., loop start, ground start or loop reverse battery options).
  - 3.2.15.8.1 To the extent AT&T requires an unbundled loop to provide ISDN, HDSL, ADSL, DS1 service or other channel performance options, such requirements will be identified on the order for unbundled loop service.
  - 3.2.15.8.2 The actual loop facilities provided may utilize various technologies or combinations of technologies. Basic unbundled loops provide an analog facility to AT&T.

MCIm Order, p. 11 at Issue 14 and AT&T Order, p. 13 at Issue 25.

#### 3.2.16 Interim Interfaces

- 3.2.16.1U S WEST will offer interim interfaces via Interconnect Mediated Access as documented in Document Number T-12-99-116472-00-02, current as of the Effective Date of this Agreement, or as mutually agreed to by the Parties.
- 3.2.16.2Until the electronic interface described in Section 3.2.16.1 is available for the required services, U S WEST agrees that the Interconnect Service Center (ISC) or similar function will accept AT&T orders. Orders will be transmitted to the ISC via mutually agreed procedures.
- 3.2.16.3Until industry standards are completed and implemented pursuant to Section 3.3.2 of this Attachment, USWEST and AT&T agree to use interim interfaces as described in Section 3.2.16.1 above.

#### 3.2.17 Ordering and Maintenance

- 3.2.17.1For the purpose of ordering unbundled Network Elements or Combinations, AT&T shall provide a blanket letter of authorization to U S WEST indicating that it shall be duly authorized by its customer to process such service orders.
- 3.2.17.2If there is a conflict between an end user (and/or its respective agent) and AT&T regarding the disconnection or provision of unbundled Network Elements or Combinations, U S WEST will honor the latest dated proof of authorization designating an agent by the end user or its respective agent. Compensation for unauthorized disconnections or transfers shall be in accordance with § 258 of the Act or by Commission rule.
- 3.2.17.3AT&T has primary responsibility for its own end user base and will have the responsibility for resolution of any service trouble report(s) from its customers. U S WEST will work cooperatively with AT&T to resolve trouble reports when the trouble condition has been isolated and found to be within a portion of U S WEST's network. Where available, AT&T must provide to U S WEST switch-based test results when testing its customer's trouble prior to U S WEST performing any repair functions. The Parties will cooperate in developing mutually acceptable test reports.
- 3.2.17.4In the event of a transfer of the end user's service for unbundled Network Elements from one provider to AT&T, AT&T shall issue a request for transfer of service to U S WEST and the provider from whom the service is being transferred. In the event of a transfer of the end user's service for unbundled Network Elements from AT&T to another provider, AT&T shall submit to U S WEST a disconnect order for such unbundled Network Elements or Combinations to facilitate the cessation of billing by U S WEST. The Parties agree to develop procedures to handle the transfer of an end user service from one provider to another.
- 3.2.17.5 [Intentionally left blank for numbering consistency.]

- 3.2.17.6When ordering unbundled loops, AT&T is responsible for obtaining or providing facilities and equipment that are compatible with the loop.
- 3.2.17.7To the extent a USWEST provided unbundled loop is provisioned without USWEST provided unbundled switching, AT&T will have responsibility for testing the unbundled loop. If, at AT&T's request, USWEST must dispatch to perform tests on an unbundled loop, and the fault is not in USWEST facilities, a charge may apply.
- 3.2.17.8To the extent a USWEST provided unbundled loop is provisioned without unbundled USWEST-provided unbundled switching, AT&T will be responsible for providing the AT&T switch interface, if applicable, on the U SWEST MDF interface to facilitate plant test.
- 3.3 Systems Interfaces and Information Exchanges
  - 3.3.1 Interim Requirements for Operational Support Systems

In accordance with Section 271 of the Act, US WEST shall provide AT&T with interfaces to access US WEST's databases and associated signaling necessary for the routing and completion of AT&T traffic. Except where otherwise specified, access to such databases, and the appropriate interfaces, shall be made available to AT&T via a Bona Fide Request. The costs will be recovered through prices based on TELRIC or other method to be decided upon by the Commission.

- 3.3.1.1 Operational Systems Interfaces Interface Implementation Timetable
  - 3.3.1.1.1 US WEST's initial operational systems interfaces deployment on January 1, 1997, will support Pre-ordering, Ordering, Provisioning and Repair capabilities for POTS (non-design) services and billing capabilities for most US WEST product offerings. Subsequent phases of the plan incorporate the capabilities to support designed services for Pre-ordering, Ordering, Provisioning, and Maintenance and Repair. Time frames for delivery of the operational support systems for designed services are estimated to be in the 2nd and 3rd quarters of 1997.
  - 3.3.1.1.2 US WEST will develop long term mediated access pursuant to the Joint Implementation Agreement.
  - 3.3.1.1.3 US WEST shall abide by the implementation schedule and the representation made within testimony presented in Commission Docket Nos. U-3175-96-479 and E-1051-96-479 in deploying its initial interfaces. US WEST shall regularly inform AT&T of its progress in implementing the interfaces, and shall allow AT&T to test the interfaces and participate in their planning. If US WEST does not fulfill the terms of its representations, it may be liable to

MCIm Order, pp. 15-16 at Issues 24-27 and AT&T Order at Issue 41.

AT&T for compensation for damages and costs due to US WEST's failure to comply with its representations.

### 3.3.1.2 OSS Interface Design

- 3.3.1.2.1 US WEST will develop OSS interfaces using an electronic gateway solution consistent with the design prescribed by the FCC Interconnection Order at paragraph 527. These gateways will act as a mediation or control point between AT&T and US WEST's Operations Systems. Additionally, these gateways will provide security for the interface, protecting the integrity of the US WEST network and its databases, and ensuring that information privacy is maintained.
- 3.3.1.2.2 Baseline gateway architecture will initially incorporate a "World Wide Web"- based, human-readable format for the transaction-type interfaces to meet the needs of AT&T. Different batch-type interfaces will be proposed in selected areas based on existing standards for their application. USWEST will offer a machine-to-machine based protocol interface (e.g., CMIP) pursuant to the Joint Implementation Agreement.
- 3.3.1.2.3 US WEST proposes the use of the existing Electronic Data Interchange (EDI) standard for the transmission of monthly local billing information. EDI is an established standard under the auspices of the American National Standards Institute/Accredited Standards Committee (ANSI/ASC) X12 Committee. A proper subset of this specification has been adopted by the Telecommunications Industry Forum (TCIF) as the "811 Guidelines" specifically for the purposes of telecommunications billing.
- 3.3.1.2.4 For the exchange of daily usage data, including third party billed, collect, and card calls, US WEST will use the Bellcore EMR format for the records, using the Connect Direct, otherwise also known as the Connect:Direct method to transmit the information to carriers.
- 3.3.1.2.5 For the exchange of Centralized Message Distribution System ("CMDS") data, U S WEST will use the existing CMDS record format, and again will use the Connect Direct method to transmit the information to carriers.

#### 3.3.1.3 Provisioning

When the "pre-ordering" and "ordering" steps are completed, the requisite information will have been obtained from the customer and the initiation of a work order can begin. Submitting a work order will result in the provisioning and installation, if necessary, of a customer's service. The functional set required to order service is: open a work order, cancel a work order, change a work order, send a firm order confirmation, send notification of order jeopardy, send notification of status change, and send notification of order completion.

#### 3.3.1.3.1 Work Order Request & Receipt

Enables AT&T to submit a work request indicating the actions required for the provisioning of products, services and features, acknowledges the receipt of the work order, and includes the date and time the transaction was received.

#### 3.3.1.3.2 Work Order Change & Cancellation

Enables AT&T to submit a change request or cancellation notice in order to modify a previously submitted work order.

#### 3.3.1.3.3 Status Query

Gives AT&T the ability to determine the current status of orders and will include the due date and remarks pertinent to the order status.

#### 3.3.1.3.4 Jeopardy Notification & Response

Provides AT&T with a notification that the requested due date cannot be met for a non-confirmed order or that there is a critical date in jeopardy for a confirmed order and will accept AT&T response indicating the action to be taken on the jeopardy notification.

#### 3.3.1.3.5 Firm Order Confirmation

Provides AT&T with a confirmation that the work order has been accepted and is anticipated to be completed by the due date. If the due date cannot be met, AT&T will receive a Jeopardy Notification, not a Firm Order Confirmation.

#### 3.3.1.3.6 Work Order Completion

Provides AT&T notification that the order has been completed, including a summary of the account containing directory information, services, associated features, and recurring and non-recurring charges.

#### 3.3.2 Permanent Access to Systems Interfaces

3.3.2.1 US WEST shall provide to AT&T a real-time, electronic interface(s) for transferring and receiving information and executing service pre-ordering, ordering, provisioning, maintenance and repair transactions for unbundled Network Elements and Resale Services, and any other database access required by FCC rules and regulations. In addition, US WEST shall also provide the electronic interfaces specified in this Agreement which support business processes or database access. The interface(s) shall be capable of supporting all of the steps in the OBF developed ordering and provisioning process. These steps include pre-order service inquiry, pre-order service inquiry response, firm order acknowledgment/rejection, firm order confirmation, and completion notification.

- 3.3.2.1.1 The Parties will jointly review each OBF standard upon completion. The review shall be completed within thirty (30) days, unless otherwise agreed to by the Parties. The review shall result in a mutual agreement on whether the new standard will be deployed. Within thirty (30) days of agreement to deploy the new standard, the Parties shall agree on a schedule for such deployment.
- 3.3.2.2 U S WEST shall provide AT&T a common electronic interface that will permit the transmittal of business and residential transactions.

#### 3.3.3 Ordering and Provisioning for Resale Services

U S WEST shall provide a real time electronic interface with at least the following specifications:

- 3.3.3.1 US WEST shall provide to AT&T a real-time, electronic interface to US WEST information systems to allow AT&T to assign telephone number(s) (if the Customer does not already have a telephone number or requests a change of telephone number).
- 3.3.3.2 For Resale Services not subject to standard intervals, USWEST shall provide to AT&T a real-time, electronic interface to schedule dispatch and installation appointments.
- 3.3.3.3 U S WEST shall provide to AT&T a real-time, electronic interface to U S WEST Customer information systems which will allow AT&T to determine if a service call is needed to install the line or service.
- 3.3.3.5 US WEST shall provide to AT&T a real-time, electronic interface which transmits status information on service orders.

#### 3.3.4 Ordering and Provisioning for Unbundling

- 3.3.4.1 For unbundled Network Elements not subject to standard intervals, U S WEST shall provide to AT&T, when available, a real-time, electronic interface which will allow AT&T to schedule appointments, and adjust pending order due dates in real-time.
- 3.3.4.2 U S WEST shall provide AT&T with results from mechanized loop tests.
- 3.3.4.3 U S WEST shall provide AT&T with confirmation of circuit assignments.

# 3.4 Standards

#### 3.4.1 General Requirements

3.4.1.1 AT&T and USWEST shall agree upon the appropriate ordering and provisioning codes to be used for each Network Element or Combinations thereof. These codes shall apply to all aspects of the unbundling of that Network Element or Combination of Network Elements and shall be known as data elements as defined by the Telecommunications Industry Forum

Electronic Data Interchange Service Order Subcommittee (TCIF-EDI-SOSC), or as mutually agreed.

# 3.5 Performance Measurements and Reporting

[Intentionally left blank for numbering consistency]

#### 3.5.2 Quality Measurements

[intentionally left blank for numbering consistency]

#### 3.5.3 Reporting

[Intentionally left blank for numbering consistency]

## 4. Connectivity Billing and Recording

This Section 4 describes the requirements for USWEST to bill and record all charges AT&T incurs for purchasing services under this Agreement.

#### 4.1 Procedures

- 4.1.1 The Parties recognize that deviations and discrepancies may occur from the various industry standards and other standards referenced in this Agreement. Subject to such discrepancies and deviations, U S WEST shall comply with these various standards. Discrepancies and deviations will be documented and reviewed.
  - 4.1.1.1 Within forty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which U S WEST will inform AT&T of deviations from standards for billing. The Parties agree that they will negotiate discrepancies and deviations in good faith. Further, the Parties agree that those documented deviations from such standards documented by U S WEST to AT&T shall supersede sections of technical standards applicable to such deviations referenced in this Agreement.
- 4.1.2 U S WEST shall record and bill in accordance with this Agreement those charges AT&T incurs as a result of AT&T purchasing from U S WEST services, as set forth in this Agreement (hereinafter "Connectivity Charges").
- 4.1.3 US WEST shall format each bill for Connectivity Charges (hereinafter "Connectivity Bill") in accordance with the CRIS, CABS or SECAB standard as appropriate to the services billed.<sup>5</sup>
- 4.1.4 Each service purchased by AT&T shall be assigned a separate and unique billing code or identifier in the form agreed to by the Parties and such code or identifier shall be provided to AT&T on each Connectivity Bill in which charges for such services appear. Each such billing code or identifier shall enable AT&T to identify the service as purchased by AT&T.

Procedural Order, July 14, 1997, pages 18-19.

- 4.1.5 Each Connectivity Bill shall set forth the quantity and description of each such service provided and billed to AT&T. All Connectivity Charges billed to AT&T shall indicate the state from which such charges were incurred.
- 4.1.6 U S WEST shall bill AT&T for each service supplied by U S WEST to AT&T pursuant to this Agreement at the rates set forth in Attachment 1 to this Agreement.
- 4.1.7 U S WEST shall bill AT&T for the Connectivity Charges incurred; provided, however, that for those usage-based Connectivity Charges where actual charge information is not determinable by U S WEST because the jurisdiction (i.e., interstate, interstate/interLATA, intrastate, intrastate/ intraLATA, local) of the traffic is unidentifiable, or for any other reason, the Parties shall jointly develop a process to determine the appropriate charges.
- 4.1.8 Measurement of usage-based Connectivity Charges shall be in actual conversation seconds. For local interconnection traffic provided under Attachments 3 and 4 of this Agreement, the total conversation time per chargeable traffic types shall be totaled for the entire monthly bill cycle, rounded to the next whole minute and then billed at the contract rate. For Resale services provided under Attachment 2 of this Agreement, the total conversation time shall be measured in accordance with U S WEST's retail tariff and billed at the contract rate.
- 4.1.9 US WEST shall provide to AT&T, at no additional charge, a Single Point of Contact for handling any Connectivity Billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.
- 4.1.10 U S WEST shall provide a Single Point of Contact for the handling of any data exchange questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.
- 4.1.11 As soon as possible after the Effective Date of this Agreement, each Party shall provide the other Party written notice of which form of the monthly Connectivity Bill is to be deemed the official bill to assist the Parties in resolving any conflicts that may arise between the official bill and another form of bill received via a different media which purportedly contains the same charges as are on the official bill.
- 4.1.12 If either Party requests an additional copy(ies) of a bill, such Party shall pay the other Party a reasonable fee per additional bill copy, unless such copy was requested due to errors, omissions, or corrections or the failure of the transmission to comply with the specifications set forth in this Agreement.
- 4.1.13 When sending Connectivity Bills via electronic transmission, to avoid transmission failures or the receipt of Connectivity Billing information that cannot be processed, AT&T shall provide U S WEST process specifications. U S WEST shall comply with mutually agreed upon processing specifications when U S WEST transmits Connectivity Billing data to AT&T. AT&T shall provide to U S WEST notice if a Connectivity Billing transmission is received that does not meet mutually agreed upon AT&T specifications. Faulty or failed transmissions shall be corrected and resubmitted to AT&T, at U S WEST's sole expense.

- 4.1.14 US WEST shall deliver to a location specified by AT&T, billing information via Connect Direct, magnetic tape or paper, as agreed to by AT&T and US WEST. In the event of an emergency, system failure or other such condition which prevents US WEST from transmitting via Connect Direct, US WEST shall notify AT&T of such difficulties within two (2) hours of detection. US WEST shall deliver to, a location specified by AT&T, billing information via magnetic tape or paper, as agreed to by AT&T and US WEST. The Parties acknowledge that all tapes transmitted to the other Party via U.S. Mail or overnight delivery service and which contain Connectivity Billing data shall not be returned to the sending party.
- 4.1.15 [Intentionally left blank for numbering consistency]
- 4.1.16 Billed amounts which are being reasonably disputed or reasonably queried or for which reasonable claims have been filed, are not due for payment until such disputes, claims or queries have been fully resolved by both AT&T and U S WEST.
- 4.1.17 [Intentionally left blank for numbering consistency]
- 4.1.18 Bill Reconciliation
  - 4.1.18.1 Each Party agrees to notify the other Party upon the discovery of a billing discrepancy ("Notice of Discrepancy").
  - 4.1.18.2 In the event of such Notice of Discrepancy, the Parties shall endeavor to resolve the discrepancy within sixty (60) calendar days after the Notice of Discrepancy is issued using normal business procedures. If the discrepancy is disputed, resolution of such dispute is expected to occur at the first level of management resulting in a recommendation for settlement of the dispute and closure of a specific billing period.
  - 4.1.18.3 Closure of a specific billing period shall occur by joint agreement of the Parties whereby the Parties agree that such billing period is closed to any further analysis and financial transactions, except those resulting from an Audit. Closure shall take place within nine (9) months of the Bill Date. The month being closed represents those Connectivity Charges that were billed or should have been billed by the applicable bill date.
  - 4.1.18.4 If the dispute is not resolved within the allotted time frame, the following resolution procedure shall begin:
    - 4.1.18.4.1 If the dispute is not resolved within sixty (60) days of the Notice of Discrepancy, the dispute shall be escalated to the second level of management for resolution.
    - 4.1.18.4.2 If the dispute is not resolved within ninety (90) days of Notice of Discrepancy, the dispute shall be escalated to the third level of management for resolution.
    - 4.1.18.4.3 If the dispute is not resolved within one hundred and twenty (120) days of the Notice of Discrepancy, upon the written request of either Party within such one hundred and twenty

(120) day period, the dispute may be resolved pursuant to the dispute resolution provision set forth in Part A of this Agreement.

- 4.1.19 U S WEST shall reimburse AT&T for incorrect Connectivity Billing charges, including, without limitation, overcharges, services ordered or requested but not delivered, interrupted services, and services of poor quality and installation problems, if such problems are caused by U S WEST. Such reimbursements shall be set forth in the appropriate section of the Connectivity Bill pursuant to appropriate standards.
- 4.1.20 The Parties agree to record call information in accordance with this Section 4.1. To the extent technically feasible, each Party shall record all call detail information associated with every call that one Party bills to the other Party. AT&T may request, through the Bona Fide Request process the recording of call records and/or call detail information that is not currently recorded by USWEST. These records shall be provided and retained pursuant to Section 5 of this Attachment.
- 4.1.21 When AT&T collocates with U S WEST in U S WEST's facility as described in this Agreement, capital expenditures (e.g., costs associated with building the "cage"), shall not be included in the Connectivity Bill provided to AT&T pursuant to this Attachment 5. All such capital expenses shall be given a unique BAN and invoice number. All invoices for capital expenses shall be sent to the location specified by AT&T for payment. All other non-capital recurring collocation expenses shall be billed to AT&T in accordance with this Agreement. The CABS/SECABS Billing Output Specifications (BOS) documents provide the guidelines on how to bill the Connectivity Charges associated with collocation.

#### 4.1.22 Local Number Portability

4.1.22.1 In accordance with the terms and conditions set forth in this Agreement, U S WEST shall record and provide to AT&T all detail information associated with an alternately billed call to an AT&T local exchange customer whose telephone number has been ported from U S WEST under INP as further described in this Agreement.

#### 4.1.23 Meet Point Billing

- 4.1.23.1 AT&T and U S WEST will establish meet-point billing ("MPB") arrangements in accordance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as otherwise mutually agreed to by the Parties. Both Parties will use their best reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, in MECAB and in MECOD.
- 4.1.23.2 The Parties will agree on a meet point percentage to enable the joint provisioning and billing of Switched Access Services to third parties in conformance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents and referenced in

U S WEST's Switched Access Tariffs. The Parties understand and agree that MPB arrangements are available and functional only to/from IXCs who directly connect with the tandem(s) that AT&T sub-tends in each LATA.

- 4.1.23.3 The Parties will use reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff, sufficient to reflect this MPB arrangement, including MPB percentages.
- 4.1.23.4 AT&T and U S WEST will implement the "Multiple Bill/Single Tariff" option in order to bill any interexchange carrier (IXC) for that portion of the network elements provided by AT&T and U S WEST. For all traffic carried over the MPB arrangement, AT&T and U S WEST shall bill IXCs for all applicable elements at the rates specified in their respective tariffs.
- 4.1.23.5 US WEST shall provide to AT&T the billing name, billing address, and carrier identification code (CIC) of the IXCs that may utilize any portion of AT&T network in an AT&T/US WEST MPB arrangement in order to comply with the MPB notification process as outlined in the MECAB document. Such information shall be provided to AT&T in the format and via the medium that the Parties agree. If US WEST does not have a CIC for any IXC that will utilize a portion of AT&T network in an AT&T/US WEST MPB arrangement, and for whom US WEST must supply to AT&T MPB billing information, then until such carrier has obtained a CIC, US WEST will submit the LEC's CIC on those MPB records provided to AT&T for MPB. US WEST understands and agrees that it will be solely responsible for obtaining any reimbursements from such carriers who have utilized the jointly provided networks of US WEST and AT&T.
- 4.1.23.6 U S WEST and AT&T agree that in an MPB arrangement where one Party provides local transport and the other Party provides the end office switching, the Party who provides the end office switching is entitled to bill any residual interconnection charges (RIC) and common carrier line (CCL) charges associated with the traffic. The Parties further agree that in those MPB situations where one Party sub-tends the other Party's access tandem, the Party providing the access tandem in only entitled to bill the access tandem fee and any associated local transport charges. The Parties also agree that the Party who provides the end office switching is entitled to bill end office switching fees, local transport charges, RIC and CCL charges, as appropriate, and such other applicable charges.
- 4,1.23.7 USWEST and AT&T will record and transmit MPB information in accordance with the standards and in the format set forth in this Attachment. USWEST and AT&T will coordinate and exchange the billing account reference ("BAR") and billing account cross reference (BACR) numbers for the MPB arrangements described in this Agreement. Each Party will notify the other if the level of billing or other BAR/BACR elements change, resulting in a new BAR/BACR number.
- 4.1.23.8 If MPB data is not processed and delivered by either U S WEST or AT&T and sent to the other Party within ten (10) calendar days of the relevant

recording period and in turn such Party is unable to bill the IXC for the appropriate charges, the Party who failed to deliver the data will be held liable for the amount of the unbillable charges.

- 4.1.23.9 If MPB data is not submitted within ten (10) calendar days of the relevant recording period or is not in the proper format as set forth in this Agreement, and if as a result the other Party is delayed in billing the IXC for the appropriate charges it incurs, the delaying Party shall pay the other Party a late MPB data delivery charge which will be the total amount of the delayed charges times a monthly rate that shall not exceed 1.5% which may be levied by law for commercial transactions, compounded daily for the number of days from the date the MPB charges should have been received to and including the date the MPB charge information is actually received.
- 4.1.23.10 Errors in MPB data exchange by the Parties may be discovered by AT&T, U S WEST or the billable IXC. Both AT&T and U S WEST agree to provide the other Party with notification of any discovered errors within two (2) Business Days of the discovery. The other Party shall correct the error within eight (8) Business Days of notification and resubmit the data. In the event the errors cannot be corrected within the time period specified above, the erroneous data shall be considered lost. If MPB data is lost due to uncorrectable errors or otherwise, the Parties shall follow the procedures set forth in Section 5 of this Attachment and compensate the other for the lost MPB billing data.
- 4.1.23.11 In the event AT&T purchases from USWEST Network Elements, or Combination thereof, in a LATA other than the LATA to or from which the MPB services are homed and in which USWEST operates an access tandem, USWEST shall, except in instances of capacity limitations, permit and enable AT&T to sub-tend the USWEST access tandem switch(es) nearest to the AT&T rating point(s) associated with the NPA-NXX(s) to/from which the MPB services are homed. In such event, AT&T shall be responsible for the transport facilities crossing LATA boundaries. In instances of capacity limitation at a given access tandem switch, AT&T shall be allowed to subtend to the next nearest USWEST access tandem switch in which sufficient capacity is available. The MPB percentages for each new rating point/access tandem pair shall be calculated in accordance with MECAB and MECOD.

# 4.2 Information Exchange and Interfaces

- 4.2.1 U S WEST shall provide AT&T a monthly Connectivity Bill that includes all Connectivity Charges incurred by and credits and/or adjustments due to AT&T for those services ordered, established, utilized, discontinued or performed pursuant to this Agreement. For each account, U S WEST shall issue one (1) bill per month and the billing cycle shall be on a calendar basis. Each Connectivity Bill provided by U S WEST to AT&T shall include:
  - 4.2.1.1 all non-usage sensitive charges incurred for the current bill period.

- 4.2.1.2 any known unbilled non-usage sensitive charges for prior periods;
- 4.2.1.3 usage sensitive charges for the current relevant bill period (from the last bill date and extending up to, and including, the current bill date);
- 4.2.1.4 any known unbilled usage sensitive charges for prior periods; and
- 4.2.1.5 any known unbilled adjustments.
- 4.2.3 The bill date must be present on each bill transmitted by U S WEST to AT&T, must be a valid calendar date, and not more than ninety (90) days old. Connectivity Bills shall not be rendered for any Connectivity Charges which are incurred under this Agreement on or before two hundred and seventy (270) days preceding the bill date, except as otherwise permitted by law.
- 4.2.4 On each bill where "Jurisdiction" is identified, local and local toll charges shall be identified as "Local" and not as interstate, interstate/interLATA, intrastate, or intrastate/intraLATA. U S WEST shall provide from and through dates for charges rendered on all Connectivity Bills.
- 4.2.5 U S WEST shall separately identify business charges from residence charges, as appropriate, and shall assign a specific adjustment or reference number provided by AT&T to each adjustment and credit included on the Connectivity Bill.
- U S WEST and AT&T shall issue all Connectivity Bills in accordance with the terms and conditions set forth in this Section 4. On Connectivity Bills U S WEST renders to AT&T. Billing Account Numbers (BANs) shall be thirteen (13) character alpha/numeric and there shall only be one (1) BAN per State unless otherwise agreed to by the Parties. The Bill Date shall be the same day month to month. Each Party shall provide the other Party at least thirty (30) calendar days written notice prior to changing, adding or deleting a BAN. The Parties shall provide one (1) Connectivity Billing invoice associated with each BAN. Each invoice must contain an invoice number, which will vary from month to month. On each bill associated with a BAN, the appropriate invoice number and the charges contained on such invoice must be reflected. All Connectivity Bills must be received by the other Party no later than ten (10) calendar days from the bill date and at least thirty-five (35) calendar days prior to the payment due date (as described in Part A of this Agreement), whichever is earlier. Any Connectivity Bill received on a Saturday, Sunday or a day designated as a bank holiday will be deemed received the next Business Day. If either Party fails to receive Connectivity Billing data and information within the time period specified above, then the payment due date will be extended by the number of days receipt has been delayed.
- 4.2.7 US WEST shall issue all Connectivity Bills containing such billing data and information in accordance with the most current version of CRIS or CABS/SECABS published by Bellcore, or its successor, or such later versions as are adopted by Bellcore, or its successor, as appropriate to the services being billed. To the extent there are no CRIS, CABS, or SECAB standards governing the formatting of certain data, such data shall be issued in the format mutually

agreed to by U S WEST and AT&T, and in accordance with Attachment 6 to this Agreement.

- 4.2.8 As detailed in the MECAB document, AT&T and USWEST will exchange all information necessary to bill third parties for switched access services traffic jointly handled by AT&T and USWEST via the meet point arrangement in a timely fashion. Information shall be exchanged in Exchange Message Record ("EMR") format (Bellcore Standard BR 010-200-010, as amended) on magnetic tape or via a mutually acceptable electronic file transfer protocol. The Parties will exchange records pursuant to this paragraph without additional compensation.
- 4.2.9 USWEST and AT&T agree that each Party shall transmit Connectivity Billing information and data in the appropriate format as provided herein, electronically via Connect Direct to the other Party at the location specified by such Party. AT&T data centers will be responsible for originating the calls for data transmission. USWEST shall transmit in accordance with the technical specifications mutually agreed upon by the Parties. AT&T will supply to USWEST its RACF ID and password before the first transmission of data via Connect Direct. Any changes to either Party's Connect Direct Node ID must be sent to the other Party no later than thirty (30) calendar days before the changes take effect.
- 4.2.10 In emergency situations when tape transmittal has been used, U S WEST shall adhere to the tape packaging requirements set forth in this Agreement. Where magnetic tape shipping containers are transported in freight compartments, adequate magnetic field protection shall be provided by keeping a 6-inch distance from any magnetic field generating device (except a magnetron-tape device). U S WEST shall only use those shipping containers that contain internal insulation to prevent damage. U S WEST shall clearly mark on the outside of each shipping container its name, contact and return address. U S WEST shall not ship any Connectivity Billing tapes in unprotected tape canisters.
- 4.2.11 All emergency billing data transmitted via tape must be provided on a cartridge (cassette) tape and must be of high quality, conform to the Parties' record and label standards, 9-track, odd parity, 6250 BPI group coded recording mode and extended binary-coded decimal interchange code (EBCDIC). Each reel of tape must be 100% tested at 20% or better "clipping" level with full width certification and permanent error free at final inspection. AT&T reserves the right to destroy a tape that has been determined to have unrecoverable errors. AT&T also reserves the right to replace a tape with one of equal or better quality.
- 4.2.12 The header record will be formatted in accordance with the appropriate IBM, CABS or EDI standards as mutually agreed upon by the Parties.
- 4.2.13 A single 6-digit serial number must appear on the external (flat) surface of the tape for visual identification. This number shall also appear in the "dataset serial number field" of the first header record of the IBM standard tape tabel. This serial number shall consist of the character "V" followed by the reporting location's four digit Originating Company Code and a numeric character chosen by the sending Party. The external

Procedural Order, July 14, 1997, pages 18-19.

and internal label shall be the same. The dataset name shall appear on the flat side of the reel and also in the "data set name field" on the first header record of the IBM standard tape label. U S WEST's name, address, and contact shall appear on the flat side of the cartridge or reel.

- 4.2.14 Tape labels shall conform to IBM OSVS Operating System Standards contained in the IBM Standard Labels Manual. IBM standard labels are 80-character records recorded in EBCDIC, odd parity.
- 4.2.15 U S WEST shall conform to the Standard Volume Label Format which will be mutually agreed upon by the Parties.
- 4.2.16 U S WEST shall use the IBM Standard Dataset Label Format which will be mutually agreed upon by the Parties.
- 4.2.17 U S WEST shall use test and production dataset format which will be mutually agreed upon for all Connectivity Bills.
- 4.2.18<sup>7</sup> Interim Billing Interfaces Processes

U S WEST offers interfaces for the exchange of several types of billing data: Monthly Billing Information, Daily Usage Data, Local Account Maintenance Report, Centralized Message Distribution System (CMDS) messages, Routing of in-region intraLATA collect, calling card, and third number billed messages.

#### 4.2.18.1 Monthly Billing Information

Includes all connectivity charges, credits, and adjustments related to Network Elements and U S WEST-provided local service.

## 4.2.18.2 Daily Usage Data

The accumulated set of call information for a given day as captured, or "recorded," by the network switches. U S WEST will provide this data to AT&T with the same level of precision and accuracy it provides itself. Such precision cannot and will not exceed the current capabilities of the software in the switches as of the Effective Date of this Agreement.

### 4.2.18.3 Local Account Maintenance Report

A report, consisting of the list of phone numbers to which the carrier started providing service since the last report, and the list of phone numbers to which the carrier is no longer providing service since the last report.

4.2.18.4 Centralized Message Distribution System ("CMDS")

Distribution of CMDS messages for AT&T customers

MCIm Order, pp. 15-16 at Issue 27 and AT&T Order at Issue 41.

4.2.18.5 Routing of In-region intraLATA Collect, Calling Card, and Third Number Billed Messages

US WEST will distribute in-region intraLATA collect, calling card, and third number billed messages to AT&T and exchange with other CLECs operating in-region in a manner consistent with existing inter-company processing agreements. Whenever the daily usage information is transmitted to a carrier, it will contain the records for these types of calls as well.

#### 4.3 Standards

- 4.3.1 At least thirty (30) calendar days prior to U S WEST sending AT&T a mechanized bill for the first time via electronic transmission, U S WEST shall send to AT&T Connectivity Bill data in the appropriate mechanized format (e.g., CABS or SECAB) for testing to ensure that bills can be processed and that bills comply with the requirements of this Attachment. After receipt of the test data from U S WEST, AT&T will notify U S WEST if the connectivity billing transmission meets AT&T testing specifications. If the transmission fails to meet the mutually agreed upon test and production dataset format, then, U S WEST shall make the necessary corrections within a mutually agreeable time frame. At least three (3) sets of testing data must meet AT&T testing specifications prior to U S WEST sending AT&T a mechanized production connectivity bill for the first time via electronic transmission or tape. Thereafter, U S WEST may begin sending AT&T production connectivity bills via electronic transfer on the next bill date, or within ten (10) calendar days, whichever is later.
- 4.3.2 U S WEST shall also provide to AT&T's designated point of contact, U S WEST's applicable operating company number ("OCN") at least thirty (30) days prior to testing and at least thirty (30) days prior to a change of OCN.
- 4.3.3 At least ninety (90) days prior to any change in existing formats or change to a different format, USWEST shall send to AT&T Connectivity Bill data in the appropriate mechanized format for testing to ensure that the bills can be processed and that the bills comply with the requirements of this Attachment. USWEST agrees that it shall not send to AT&T bill data in the new mechanized format until such bill data has met the testing specifications as set forth in this Section.
- 4.3.4 During the testing period, in addition to CONNECT DIRECT, USWEST shall also transmit to AT&T Connectivity Billing data and information via paper or tape as specified by AT&T. Test tapes shall be sent to an AT&T specified location.
- 4.3.5 For Connectivity Bills issued in CABS or SECAB format, U S WEST agrees that if it transmits data to AT&T in a mechanized format, U S WEST shall also comply with the following specifications which are not contained in CABS or SECAB guidelines but which are necessary for AT&T to process Connectivity Billing information and data:
  - 4.3.5.1 The bill date shall not contain spaces or non-numeric values.
  - 4.3.5.2 Each Connectivity Bill must contain at least one (1) detail record.
  - 4.3.5.3 Any "from" date should be less than or equal to the associated "thru" date and neither date can contain spaces.

4.3.5.4 The invoice number must not have embedded spaces or low values.

4.3.6 U S WEST agrees that in order to ensure the proper performance and integrity of the entire Connectivity Billing process, U S WEST shall be responsible and accountable for transmitting to AT&T an accurate and current bill. U S WEST agrees to implement control mechanisms and procedures to render a bill that accurately reflects the services ordered and used by AT&T.

# 5. Provision Of Customer Usage Data

This Section 5 sets forth the terms and conditions for U S WEST's provision of Recorded Usage Data (as defined in this Attachment 5) to AT&T and for information exchange regarding long distance billing.

#### 5.1 Procedures

#### 5.1.1 General

- 5.1.1.1 U S WEST shall comply with various industry, OBF, and other standards referred to throughout this Agreement. To satisfy these requirements, the Parties agree to a mutual interpretation of all standards referred to in this Section.
- 5.1.1.2 The Parties shall mutually agree to OBF standards and the additional standards outlined in this Agreement when recording and transmitting Usage Data.
- 5.1.1.3 As new standards are developed and adopted by industry, U S WEST and AT&T will negotiate mutually agreeable implementation of those standards.
- 5.1.1.4 US WEST shall record all usage to be billed to AT&T originating from, terminating to or billed to AT&T Customers using US WEST services ordered by AT&T. Recorded Usage Data includes, but is not limited to, the following categories of information:

Call attempts
Completed calls

Use of CLASS/LASS/custom features

Calls to information providers reached via USWEST facilities and contracted by USWEST

Calls to Directory Assistance where U S WEST provides such service to an AT&T customer

Calls completed via USWEST-provided Operator Services where USWEST provides such service to AT&T local service Customer For USWEST-provided Centrex Service, station level detail records shall include complete call detail and complete timing information

5.1.1.5 Retention of Records: U S WEST shall maintain a machine readable backup copy of the message detail provided to AT&T for a minimum of forty-five (45) calendar days. U S WEST shall provide any data back-up to AT&T upon the request of AT&T.

- 5.1.1.6 U S WEST shall provide to AT&T Recorded Usage Data for AT&T Customers only. U S WEST shall not submit other carrier local usage data as part of the AT&T recorded usage data.
- 5.1.1.7 U S WEST shall not bill to AT&T Customers any recurring or non-recurring charges for service provided by U S WEST to AT&T except where explicitly permitted to do so within a written agreement between U S WEST and AT&T.
- 5.1.1.8 The Parties shall record and rate all calls to information service providers (e.g., 976 service calls) and shall bill such calls directly the calling party's local service provider. In the event a Party's end-user disputes such a call, that Party may recourse consistent with the recourse arrangement the billing Party has with its information service provider.
- 5.1.1.9 U S WEST shall provide Recorded Usage Data to AT&T billing locations as designated by AT&T.
- 5.1.1.10U S WEST shall establish an Interconnect Service Center (ISC) or similar function to serve as AT&T's single point of contact to respond to AT&T call usage, data error, and record transmission inquiries.
  - 5.1.1.10.1 U S WEST shall provide AT&T with a single point of contact and remote identifiers for each sending location.
- 5.1.1.11AT&T shall provide a single point of contact responsible for receiving usage transmitted by U S WEST and receiving usage tapes from a courier service in the event of a facility outage.
- 5.1.1.12U S WEST shall bill and AT&T shall pay the charges for Recorded Usage Data. Billing and payment shall be in accordance with the applicable terms and conditions set forth in the Connectivity Billing and Recording Section of this Attachment 5.
- 5.1.1.13 Without waiver of, and in addition to the Audit and Examination rights set forth in Part A of this Agreement, upon reasonable notice and at reasonable times, a Party or its authorized representatives may examine the recording Party's AMA records which relate to perceived problems with the recordings of the usage data relating to the billed Party under this Attachment.

#### 5.1.2 Charges

- 5.1.2.1 The Parties may charge fees for recording, rating or transmitting usage data. For the six (6) months following the initial recording, rating or transmitting of non-test usage data, the Parties shall not charge each other.
- 5.1.2.2 No charges shall be assessed for incomplete call attempts.

## 5.1.3 Central Clearinghouse & Settlement

- 5.1.3.1 U S WEST shall support and participate with AT&T to develop an in and out-collect process developed for intra-region alternately billed messages.
- 5.1.3.2 USWEST shall settle with AT&T for both intra-region and inter-region billing exchanges of calling card, bill-to-third party, and collect calls, including settlement through the CMDS CATS system for inter-region billing.

#### 5.1.4 Lost Data

- 5.1.4.1 Loss of Recorded Usage Data AT&T recorded usage data determined to have been lost, damaged or destroyed as a result of an error or omission by U S WEST in its performance of the recording function shall, upon AT&T request, be recovered by U S WEST at no charge to AT&T. In the event the data cannot be recovered by U S WEST, U S WEST shall estimate the messages and associated revenue, with assistance from AT&T, based upon the method described below. This method shall be applied on a consistent basis, subject to modifications agreed to by U S WEST and AT&T. This estimate shall be used to adjust amounts AT&T owes U S WEST for services U S WEST provides in conjunction with the provision of recorded usage data.
- Partial Loss U S WEST shall review its daily controls to determine if data has been lost. When there has been a partial loss, actual message and minute volumes shall be reported, if possible. Where actual data are not available, a full day shall be estimated for the recording entity, as outlined in the following paragraphs. The amount of the partial loss is then determined by subtracting the data actually recorded for such day from the estimated total for such day.
- 5.1.4.3 Complete Loss Estimated message and minute volumes for each loss consisting of an entire AMA tape or entire data volume due to its loss prior to or during processing, loss after receipt, degaussed before processing, receipt of a blank or unreadable tape, or lost for other causes, shall be reported.
- 5.1.4.4 Estimated Volumes From message and minute volume reports for the entity experiencing the loss, USWEST shall secure message/minute counts for the four (4) corresponding days of the weeks preceding that in which the loss occurred and compute an average of these volumes. USWEST shall apply the appropriate average revenue per message ("ARPM") mutually agreed upon to the estimated message volume to arrive at the estimated lost revenue.
- 5.1.4.5 If the day of loss is not a holiday but one (1) (or more) of the preceding corresponding days is a holiday, U S WEST shall use additional preceding weeks in order to procure volumes for two (2) non-holidays in the previous two (2) weeks that correspond to the day of the week that is the day of the loss.

- 5.1.4.6 If the loss occurs on a weekday that is a holiday (except Christmas and Mother's Day), U S WEST shall use volumes from the two (2) preceding Sundays.
- 5.1.4.7 If the loss occurs on Mother's Day or Christmas, USWEST shall use volumes from that day in the preceding year multiplied by a growth rate mutually agreed upon by the Parties.
- 5.1.4.8 AT&T may also request data be provided that has previously been successfully provided by U S WEST to AT&T. U S WEST shall re-provide such data, if available, at a charge mutually agreed to by the Parties.

# 5.1.5 Testing, Changes and Controls

- 5.1.5.1 The Recorded Usage Data, EMR format, content, and transmission process shall be tested as mutually agreed to by the Parties.
- 5.1.5.2 Interface Testing: The purpose of this test is to ensure that the usage records can be sent by USWEST to AT&T and can be accepted and processed by AT&T. USWEST shall provide a test file to AT&T designated Regional Processing Center (RPC) in the format that shall be used for live day-to-day processing. The file's test content and volume shall be mutually agreed to by the Parties. AT&T shall review the file and verify that it conforms to its data center requirements. AT&T shall notify USWEST in writing whether the format is acceptable. AT&T shall also provide USWEST with the agreed-upon control reports as part of this test.
- 5.1.5.3 Operational Test: The purpose of this test is to ensure that volumes of usage in consecutive sequence can be extracted, distributed, and processed by U S WEST and AT&T.
- 5.1.5.4 For testing purposes, USWEST shall provide AT&T with USWEST recorded usage for a minimum of five (5) consecutive days. AT&T shall provide USWEST with the message validation reports associated with test usage.
- 5.1.5.5 Test File: Test data should be transported via CONNECT DIRECT whenever possible. In the event that courier service must be used to transport test media, the physical tape characteristics to be used are described in this Attachment.
- 5.1.5.6 Periodic Review: Control procedures for all usage transferred between U S WEST and AT&T shall require periodic review. This review may be included as part of an annual audit of U S WEST by AT&T or as part of the normal production interface management function. Breakdowns which impact the flow of usage between U S WEST and AT&T must be identified and jointly resolved as they occur. The resolution may include changes to control procedures, as similar problems would be avoided in the future. Any changes to control procedures shall be mutually agreed upon by AT&T and U S WEST.

#### 5.1.5.7 US WEST Software Changes

- 5.1.5.7.1 When U.S.WEST plans to introduce any software changes which impact the format or content structure of the usage data feed to AT&T, designated U.S.WEST personnel shall notify AT&T no less than one hundred twenty (120) calendar days before such changes are implemented.
- 5.1.5.7.2 US WEST shall communicate the projected changes to the appropriate groups in AT&T so that potential impacts on AT&T processing can be determined.
- 5.1.5.7.3 AT&T personnel shall review the impact of the change on the entire control structure and the post conversion test plan, herein. AT&T shall negotiate any perceived problems with U S WEST and shall arrange to have the data tested utilizing the modified software.
- 5.1.5.7.4 If it is necessary for USWEST to request changes in the schedule, content or format of usage data transmitted to AT&T, USWEST shall notify AT&T.

#### 5.1.5.8 AT&T Requested Changes

- 5.1.5.8.1 AT&T may request changes in the schedule, content, format of the usage data transmitted from USWEST, as deemed necessary by AT&T.
- 5.1.5.8.2 When the negotiated changes are to be implemented, AT&T and/or U S WEST shall arrange for testing of the modified data in a Post Conversion Test Plan designed to encompass all types of changes to the usage data transferred by U S WEST to AT&T and the methods of transmission for that data.

#### 5.1.5.9 U S WEST System Change Description

- 5.1.5.9.1 For a USWEST system change, USWEST shall provide AT&T with an overall description of the change, stating the objective and a brief explanation of the reasons for the change,
- 5.1.5.9.2 During the initial negotiations regarding the change, U S WEST shall provide a list of the specific records and/or systems impacted by the change to designated AT&T personnel.
- 5.1.5.9.3 USWEST shall also provide AT&T a detailed description of the changes to be implemented. It shall include sufficient detail for designated AT&T personnel to analyze and estimate the effects of the changes and to design tests to verify the accuracy of the implementation.

#### 5.1.5.10 Change Negotiations

5.1.5.10.1 AT&T shall be notified in writing of all proposed change negotiations initiated by USWEST in writing. In turn, AT&T shall notify USWEST in writing of proposed change negotiations initiated by AT&T.

5.1.5.10.2 After formal notification of planned changes, whether originated by USWEST or AT&T, designated AT&T personnel shall schedule negotiation meetings as required with designated USWEST personnel. The first meeting should produce the overall change description (if not previously furnished) and the list of records and/or systems affected.

5.1.5.10.3 In subsequent meetings, U S WEST shall provide the detailed description of changes to be implemented. After reviewing the described changes, designated AT&T personnel shall negotiate a detailed test procedure with U S WEST.

5.1.5.11 Changes to controls: AT&T may request changes to the control structure. The Parties shall mutually agree on the requested changes.

#### 5.1.5.12 Verification Of Changes

5.1.5.12.1 Based on the detailed description of changes furnished by USWEST, AT&T and USWEST personnel shall:

Determine the type of change(s) to be implemented;

Develop a comprehensive test plan;

Negotiate scheduling and transfer of modified data with US WEST;

Negotiate testing of modified data with the appropriate AT&T RPC;

Negotiate processing of verified data through the AT&T billing system with the RPC:

Arrange for review and verification of testing with appropriate AT&T groups; and

Arrange for review of modified controls, if applicable.

#### 5.1.5.13 Introduction of Changes:

5.1.5.13.1 When all the testing requirements have been met and the results reviewed and accepted, designated AT&T and USWEST personnel shall:

Negotiate an implementation schedule;

Verify the existence of a contingency plan with the appropriate AT&T personnel;

Arrange for the follow-up review of changes with appropriate AT&T personnel;

Arrange for appropriate changes in control program, if applicable; and Arrange for long-term functional review of impact of changes on the AT&T billing system, i.e., accuracy, timeliness, and completeness.

# 5.2 Information Exchange and Interfaces

#### 5.2.1 Core Billing Information

- 5.2.1.1 Recorded Usage Data includes all intraLATA toll and local usage. U S WEST shall provide AT&T with unrated EMR records associated with all intraLATA toll and local usage which itrecords on AT&T behalf. Any category, group and/or record types approved in the future for U S WEST shall be included if they fall within the definition of Local Resale. AT&T shall be given notification thirty (30) days prior to implementation of a new type, category and/or record.
- 5.2.1.2 U S WEST shall provide rated EMR records only when explicit consent for sending such records has been obtained from AT&T.
- 5.2.1.3 All messages recorded by a Party and billed to the other Party are to be transmitted to the billed Party. Recorded usage includes all usage billable to the other Party.
- 5.2.1.4 Data Delivery Schedules: Data shall be delivered to AT&T by U S WEST daily (Monday through Friday, except holidays) unless otherwise negotiated. AT&T and/or U S WEST Data Center holidays are excluded. U S WEST and AT&T shall exchange schedules of designated Data Center holidays.

# 5.2.2 Local Account Maintenance

- 5.2.2.1 When AT&T purchases local service from U S WEST, and, as appropriate, when AT&T purchases certain unbundled Network Elements, U S WEST shall provide AT&T with local account maintenance as described herein.
- 5.2.2.2 When notified by a CLEC that an AT&T customer has switched to CLEC's service, USWEST shall provision the change and notify AT&T via Connect:Direct within twenty-four (24) hours of the provisioning that the customer has changed to another service provider ("OutPLOC").
- 5.2.2.3 When notified by AT&T that a customer has changed its PIC only from one interexchange carrier to another, U S WEST shall provision the PIC only change.
- 5.2.2.4 If notified by an IXC using a '01' PIC order record that a AT&T Customer has changed its PIC only, U S WEST shall reject the order and notify that IXC using an industry standard '3148' record with the operating company number of AT&T indicated, that a '01' care PIC record should be sent to AT&T for processing.

#### 5.2.3 Product/Service Specific

5.2.3.1 Subject to conditions specified in Section 5.1.1(c) of this Attachment 5, U S WEST shall provide a Specialized Service/Service Provider Charge record to support the Special Features Star Services if these features are

part of USWEST's offering. Such record shall be an EMR 10-01-18 record or industry standard record as may subsequently be mutually agreed to by the Parties. Such record shall be a 10-01-18 record or Bellcore assigned record as may be subsequently agreed to by the Parties.

#### 5.2.4 **Emergency Information**

- 5.2.4.1 USWEST shall provide the transport facility for transmitting usage and billing data between the USWEST location and the AT&T location. USWEST shall transmit via CONNECT DIRECT whenever possible. In the event usage transfer cannot be accommodated by CONNECT DIRECT because of extended (one (1) Business Day or longer) facility outages, U S WEST shall contract for a courier service to transport the data via tape.
- 5.2.4.2 The Parties shall mutually agree to the following standards when emergency data is transported to AT&T on tape or cartridge via a courier. The data shall be in fixed or variable block format as mutually agreed to by the Parties:

Tape:

9-track, 6250 (or 1600) BPI (Bytes per inch)

Cartridge:

38,000 BPI (Bytes per inch)

LRECL:

2,472 Bytes Odd

Parity:

Extended Binary Coded Decimal Interchange Code

(EBCDIC)

Character Set:

External labels: Exchange Carrier Name, Dataset Name (DSN) and

volume serial number

Internal labels: IBM Industry OS labels shall be used. They consist of a single volume label and two (2) sets of header and trailer labels.

5.2.4.1 To the extent the above standards are changed or revised, the Parties may agree to negotiate the incorporation of such new standards.

#### 5.2.5 Rejected Recorded Usage Data

At the discretion of AT&T, any messages that cannot be rated and/or billed 5.2.5.1 by AT&T may be returned to USWEST via CONNECT DIRECT. Returned messages shall be sent directly to USWEST in EMR format. Standard EMR return codes shall be utilized.

#### Interfaces 5.2.6

- The Parties shall transmit formatted Recorded Usage Data via Connect 5.2.6.1 Direct.
- AT&T shall notify USWEST of resend requirements if a pack or entire 5.2.6.2 dataset must be replaced due to pack rejection, damage in transit, dataset name failure, etc.
- Critical edit failure on the pack header or pack trailer records shall result in 5.2.6.3 pack rejection (e.g., detail record count not equal to grand total included in

the pack trailer). Notification of pack rejection shall be made by AT&T within one (1) Business Day of processing. Rejected packs shall be corrected by U S WEST and retransmitted to AT&T within twenty-four (24) hours or within an alternate time frame negotiated on a case by case basis.

5.2.6.4 A pack shall contain a minimum of one (1) message record or a maximum of 9,999 message records plus a pack header record and a pack trailer record. A file transmission contains a maximum of ninety-nine (99) packs. A dataset shall contain a minimum of one (1) pack. U S WEST shall provide AT&T one (1) dataset per sending location, with the agreed upon RAO/OCN populated in the header and trailer records.

#### 5.2.7 Formats & Characteristics

- 5.2.7.1 Rated in collect messages should be transmitted via the CONNECT DIRECT and can be intermingled with the unrated messages. No special packing is needed.
- 5.2.7.2 EMR: U S WEST shall provide Recorded Usage Data in the EMR format and by category, group and record type, and shall be transmitted, via a direct feed, to AT&T. The types of EMR records that AT&T can expect to receive from U S WEST, includes, but is not limited to, the following:

Header Record
Trailer Record
Detail Records

Credit Records
Rated Credits
Cancel Records
Correction Records

20-21-01, 20-20-01 or 20-24-01
20-21-02, 20-20-02 or 20-24-02
01-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
10-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
41-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Correction Records

20-21-01, 20-20-01 or 20-24-01
20-21-02, 20-20-02 or 20-24-02
20-21-02, 20-20-02 or 20-20-02
20-21-02, 20-20-02 or 20-20-02
20-21-02, 20-20-02
20-21-02, 20-20-02
20-21-02, 20-20-02
20-21-02, 20-20-02
20-21-02, 20-20-02
20-21

- Category 01 is utilized for rated messages; Category 10 is utilized for unrated messages. Category 10 records are to have indicator 13 populated with a value of 5
  - 5.2.7.2.1 To the extent the above standards are changed or revised, the Parties may agree to incorporate such new standards.
- 5.2.7.3 U S WEST shall comply with the most current version of Bellcore standard practice guidelines for formatting EMR records.
- 5.2.7.4 The Interfacing Bell RAO, OCN, and remote identifiers shall be used by AT&T to control invoice sequencing and each shall have its own invoice controls. The OCN shall also be used to determine where the message returns file, containing any misdirected and unguidable usage, shall be sent.
- 5.2.7.5 The file's Record Format (RECFM) shall be Variable Block or fixed as negotiated, Size and the Logical Record Length (LRECL) shall be as mutually agreed to by the Parties.
- 5.2.7.6 Intentionally left blank for numbering consistency...

5.2.7.7 U S WEST shall transmit the usage to AT&T using dataset naming conventions mutually agreed upon by the Parties.

#### 5.2.8 Controls

- 5.2.8.1 AT&T shall test and certify the CONNECT DIRECT interface to ensure the accurate receipt of Recorded Usage Data.
- 5.2.8.2 Header and trailer records shall be populated in positions 13-27 with the following information:

Position	•
13-14	Invoice numbers (1-99)
15-16	Bell Co. ID number
17-19	Interfacing Bell RAO Code
20-23	AT&T OCN - value 7229
24-27	Reseller OCN

The trailer grand total record count shall be populated with total records in pack (excluding header & trailer)

- 5.2.8.3 Control Reports: AT&T accepts input data provided by U S WEST in EMR format in accordance with the requirements and specifications detailed in this Attachment 5. In order to ensure the overall integrity of the usage being transmitted from U S WEST to AT&T, data transfer control reports shall be required. These reports shall be provided by AT&T to U S WEST on a daily or otherwise negotiated basis and shall reflect the results of the processing for each pack transmitted by U S WEST.
- 5.2.8.4 Control Reports Distribution: Since U S WEST is not receiving control reports, dataset names shall be established during detailed negotiations.
- 5.2.8.5 Message Validation Reports: AT&T shall provide Message Validation reports to the designated U S WEST System Control Coordinator once a day (or as otherwise agreed to by the Parties). These reports shall be provided for all data received within U S WEST Local Resale feed and shall be transmitted Monday through Friday.
- 5.2.8.6 Incollect Pack Processing: This report provides vital statistics and control totals for packs rejected and accepted and dropped messages. The information is provided in the following report formats and control levels:

U S WEST name; and
Reseller total messages processed in a pack;
Packs processed shall reflect the number of messages initially erred and accepted within a pack; and
Reseller total packs processed.

#### 5.3 Standards

- 5.3.1 When requested for security purposes and on an exception basis when a reasonable need is demonstrated, a Party shall provide the other Party with Recorded Usage Data within two (2) hours of the call completion or within the same period that the recording Party would have that data for itself under similar circumstances. If not available in EMR format, the Recorded Usage Data may be provided in AMA format.
- 5.3.2 U S WEST shall include the Working Telephone Number (WTN) of the call originator on each EMR call record.
- 5.3.3 End user Customer usage records and station level detail records shall be in packs in accordance with EMR standards or applicable industry standards as defined in Section 5.3.1 of this Attachment.
- 5.3.4 U S WEST shall provide Recorded Usage Data once a day to AT&T on a schedule to be determined by the Parties, Monday through Friday, excluding holidays. The Parties shall work together to reach agreement on an acceptable holiday schedule. U S WEST shall provide to AT&T the Recorded Usage Data not more than one (1) Business Day after termination of the call for which usage data is to be provided.
- 5.3.5 U S WEST shall segregate and organize the Recorded Usage Data in accordance with Section 5.2.7 of this Attachment.

#### 5.4 Standards for Transmitting and Recording Usage Data

- 5.4.1 Within thirty (30) days of the Effective Date of this Agreement, the Parties shall jointly develop standards for transmitting and recording usage data.
- 5.4.2 Timeliness:
- 5.4.3 Completeness
- 5.4.4 Accuracy:
- 5.4.5 [Intentionally left blank for numbering consistency]
- 5.4.6 Recorded Usage Data Accuracy
- 5.4.7 Usage Inquiry Responsiveness

#### 5.5 Reporting

5.5.1 Within thirty (30) days of the Effective Date of this Agreement, the Parties shall jointly develop reporting procedures for the standards for transmitting and recording usage data described in Section 5.4 above.

#### 6. Maintenance

# 6.18 Interim Maintenance and Repair Processes

Repair capabilities allow AT&T to report trouble with communications circuits and services provided by USWEST. The functions, processes, and systems used in repair are based on a Trouble Report (TR), which is an electronic document maintained in one or more Operations Systems. ATR contains information about the customer, the trouble, the status of the work on the trouble and the results of the investigation and resolution efforts. These business capabilities will be made available to AT&T in the following functional set: open a trouble report, cancel a trouble report, send notification of status change, and close a trouble report.

#### 6.1.1 Open Trouble Report

Gives AT&T the capability to enter a trouble report ("TR") which initiates U S WEST repair activities.

#### 6.1.2 Cancel Trouble Report

Gives AT&T the capability to cancel a TR that it had previously opened.

#### 6.1.3 Trouble Report Closure

Informs AT&T as soon as a TR it opened) has been closed, indicating U S WEST has completed repair activities and considers the trouble resolved.

#### 6.1.4 Get Current Trouble Report Status

Allows AT&T to request the current status of a TR that the customer previously opened with USWEST. It is only allowed on trouble reports which were entered by the customer requesting the status.

#### 6.1.5 Modify Trouble Report

Allows AT&T to change certain data in a TR that the customer previously opened with US WEST, possibly affecting US WEST repair activities (with some negotiable exceptions). It is only allowed on TRs which were entered by the customer making the modification, and does not necessarily protect the customer from charges associated with previous information in the TR.

# 6.1.6 Escalate Trouble Report

Allows AT&T to bring a TR that the customer previously opened with U S WEST to the attention of a higher level of supervision within U S WEST, with the expectation that the TR will get more attention. It is only allowed on TRs which were entered by the customer requesting the escalation, and

Per MCIm Order, pp. 15-16 at Issue 26 and MCIm/AT&T Order at Issue 41.

typically needs to be responded to by the person at the level escalated to within a negotiated time frame.

#### 6.1.7 Verify Features

Allows AT&T to verify line features on an existing line.

#### 6.1.8 Text Messaging

Allows textual communication between US WEST and AT&T personnel for the purpose of resolving the trouble. The messages are logged in the TR, thus the function can only be performed for TRs which were entered by the customer involved in the messaging. Specific uses of this messaging include allowing the customer to add descriptive information about the trouble, allowing US WEST to request additional trouble information, and allowing US WEST to implement the status window functionality through manual procedures.

#### 6.1.9 Trouble History

Provides AT&T with trouble history information currently retained on the circuit.

#### 6.1.10 Testing

Notifies AT&T of the results of initial or subsequent circuit tests for a TR previously opened by that customer.

# 6.2 General Requirements

- 5.2.1 U S WEST shall provide repair, maintenance, testing, and surveillance for all Telecommunications Services and unbundled Network Elements and Combinations in accordance with the terms and conditions of this Agreement.
  - 6.2.1.1 US WEST shall provide AT&T with the same level of maintenance support as US WEST provides itself in accordance with standards and performance measurements that US WEST uses and/or which are required by law, regulatory agency, or by US WEST's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including, but not limited to, such new architecture, equipment, facilities, and interfaces as US WEST may deploy) that US WEST provides to AT&T under this Agreement.
  - 6.2.1.2 U S WEST shall provide a SPOC (Single Point of Contact) for Residence, and a SPOC for Business for AT&T to report via a toll free telephone number maintenance issues and trouble reports twenty four (24) hours a day and seven (7) days a week. The SPOC Residence toll free number, and SPOC Business toll free number, will be the numbers for all of U S WEST's fourteen (14) states.

- 6.2.1.3 U S WEST shall provide AT&T maintenance dispatch personnel on the same schedule that it provides its own Customers.
- 6.2.2 AT&T shall handle all interaction with AT&T Customers including all calls regarding service problems, scheduling of technician visits, and notifying the Customer of trouble status and resolution. When a USWEST technician is on site, the customer will be statused in accordance with standard USWEST procedures.
- 6.2.3 AT&T and US WEST will provide their respective customers with the correct telephone numbers to call for access to their respective repair bureaus.
- 6.2.4 Customers of AT&T shall be instructed to report all cases of trouble to AT&T. Customers of USWEST shall be instructed to report all cases of trouble to USWEST. AT&T and USWEST will provide their respective repair contact numbers to one another on a reciprocal basis.
- 6.2.5 USWEST shall cooperate with AT&T to meet maintenance standards for all Telecommunications Services, unbundled Network Elements and Combinations ordered under this Agreement. Such maintenance standards shall include, without limitation, standards for testing, network management, call gapping, and notification of upgrades as they become available.
- 6.2.6 All USWEST employees or contractors who perform repair service for AT&T Customers shall follow mutually agreed to procedures in all their communications with AT&T Customers. At a minimum, these procedures, and protocols shall ensure that: (a) USWEST employees or contractors shall perform repair service that is at least equal in quality to that provided to USWEST Customers; and (b) trouble calls from AT&T Customers shall receive response time priority that is at least equal to that of USWEST Customers, regardless of whether the Customer is an AT&T Customer or a USWEST Customer.
- 6.2.7 In responding to repair calls, neither Party shall make disparaging remarks about each other, nor shall they use repair calls as the basis for internal referrals or to solicit customers to market services. Either Party may respond with accurate information in answering customer questions.
- 6.2.8 U S WEST shall perform scheduled maintenance, including, without limitation, required and recommended maintenance intervals and procedures, for all Telecommunications Services, Network Elements and Combinations provided to AT&T under this Agreement equal in quality to that currently provided by U S WEST in the maintenance of its own network.
  - 6.2.8.1 U S WEST shall exercise its best efforts to provide the designated AT&T SPOC at least sixty (60) days' advance notice of any scheduled activity which will likely impact AT&T customers.
  - 6.2.8.2 Plans for significant service affecting activities shall include, at a minimum, the following information: location and type of facilities, specific work to be performed, date and time work is scheduled to commence, work schedule to be followed, date and time work is scheduled to be completed, and estimated number of work hours for completion. Examples of such

activities include, but are not limited to, office conversions, cable facility rolls, and tandem re-homes.

- 6.2.9 USWEST shall exercise its best efforts to notify AT&T of all non-scheduled activities to be performed by USWEST on any Network Element, including, without limitation, any hardware, equipment, software, or system, providing service functionality which will likely impact AT&T Customers.
  - 6.2.9.1 U S WEST shall provide to the designated SPOC maximum advance notice of such non-scheduled activities in the same time and manner that it provides to its operation service centers.
  - 6.2.9.2 U S WEST shall perform emergency maintenance as promptly as possible to maintain or restore service and shall promptly advise the AT&T designated SPOC of any such actions it takes.
- 6.2.10 USWEST shall provide AT&T a detailed description of any and all emergency restoration plans and disaster recovery plans which are in place during the term of this Agreement. Such plans shall include, at a minimum, the following: (a) provisions for immediate notification to AT&T of the existence, location, and source of any emergency network outage potentially affecting an AT&T Customer; (b) establishment of a SPOC responsible for initiating and coordinating the restoration of all local ervices and Network Elements or Combinations; (c) methods and procedures to provide AT&T with real-time access to information relating to the status of restoration efforts and problem resolution during the restoration process; (d) an inventory and description of mobile restoration equipment, by location; (e) methods and procedures for reprovisioning of all Telecommunications Services and Network Elements or Combinations after initial restoration, (1) equal priority, as between AT&T Customers and USWEST Customers, for restoration efforts, consistent with FCC Service Restoration guidelines, including, without limitation, deployment of repair personnel, and access to spare parts and components, and (g) a mutually agreeable process for escalation of maintenance problems, including a complete, up-to-date list of responsible contacts, each available twenty-four (24) hours per day, seven (7) days per week.
  - 6.2.10.1 For purposes of this Section 6, an emergency network outage is defined as 5,000 or more blocked call attempts in a ten (10) minute period for all Customers in a single exchange.
  - 6.2.10.2 AT&T and U S WEST will work cooperatively to assess up chain (end office to tandem calls), down chain (tandem to end office calls), and overall customer impact. U S WEST categorizes, reports and reacts to network outages using FCC reporting criteria and U S WEST Abnormal Condition Report Criteria.
- 6.2.11 US WEST and AT&T shall establish mutually acceptable methods and procedures for the immediate handling of misdirected calls from AT&T customers to US WEST requesting repair. The Customer shall be informed that AT&T is its local service provider (LSP), and the US WEST representative will provide the AT&T customer with the appropriate telephone number of the AT&T repair center. If the LSP screen indicator is not available, the US WEST representative will ask the AT&T Customer if it knows the name of its LSP. The US WEST representative will provide the

AT&T Customer with the appropriate number of the AT&T repair center. These calls are limited to repair information only, and are not to be used for marketing purposes.

- 6.2.12 When electronic interface is available, USWEST shall inform AT&T of repair completion and trouble reason within ten (10) minutes upon completion. If no electronic interface is available, AT&T will provide a SPOC for USWEST to call as soon as possible after repair completion. USWEST shall notify AT&T that the trouble has been cleared. This is done on a real-time basis. Therefore the technician will notify AT&T in a similar manner, for both dispatched-in and dispatched-out troubles. The report shall not be considered closed until such notification is made. AT&T will contact its Customer to determine if repairs were completed and confirm the trouble no longer exists.
- 6.2.13 US WEST and AT&T shall mutually develop escalation procedures to be followed if, in AT&T judgment, any performance standard defined in this Agreement is not met for any individual trouble report. The escalation procedures to be provided shall include names and telephone numbers of US WEST management personnel who are responsible for maintenance issues and who will be contacted when a trouble condition is escalated.
- 6.2.14 In the event U S WEST shall fail to conform to any specified performance and service quality standards, identified elsewhere in this Agreement, U S WEST shall perform and deliver to AT&T, a standard root cause analysis of the reasons for U S WEST's failure to conform, and U S WEST shall correct said cause as soon as possible, at its own expense.
- 6.2.15 Dispatching of USWEST technicians to AT&T Customer premises shall be accomplished by USWEST pursuant to a request received from AT&T. AT&T shall be able to schedule maintenance appointments in intervals at parity with USWEST upon opening of trouble report.
- 6.2.16 [Intentionally left blank for numbering consistency]
- 6.2.17 U S WEST shall supply AT&T with a unique number to identify each AT&T initial trouble report opened.
  - 6.2.17.1 U S WEST and AT&T agree to a trouble priority and severity coding format for all trouble reports handled between the two companies. Troubles are prioritized according to appointment schedules:
    - 6.2.17.1.1 Priority 1 = Out of Service
    - 6.2.17.1.2 Priority 2 = Affecting Service
    - 6.2.17.1.3 Priority 3 = Feature Trouble
  - 6.2.17.2 Customer has the ability to escalate.
- 6.2.18 U S WEST shall provide for resale any maintenance/protection plans for services offered under this Agreement to AT&T that it offers U S WEST's own Customers.
- 6.2.19 USWEST's current trouble reporting system does not provide the capability to reopen a closed trouble report. Therefore, USWEST shall allow AT&T to

designate that a trouble report is associated with the initial trouble report which was closed in the past twenty-four (24) hours without repairs being performed to the Customer's satisfaction. US WEST shall measure the frequency of these types of repeated reports and will demonstrate non-discriminatory treatment to AT&T.

# 6.2.20 Additional Unbundling Requirements

- 6.2.20.1 When trouble is reported by a Customer served through unbundled Network Elements, AT&T will test its network to identify any problems. If no problems are identified with the AT&T network, AT&T will open a trouble report with U S WEST and provide switch-based test results to the U S WEST technician. U S WEST shall then test its portion of the network and perform repairs as required in the time frames set forth below in this Attachment.
  - 6.2.20.1.1 If USWEST tests the unbundled loop and there is no trouble found ("NTF"), the same shall be reported back to AT&T. If, upon testing the unbundled loop, the trouble is isolated to the Customer side of the NID (inside wire, CPE, etc.), AT&T shall be billed a trouble isolation charge ("TIC"). If, after AT&T has opened a trouble ticket, it cancels the trouble ticket before a USWEST technician has been dispatched on the trouble, no charges will apply. If the USWEST technician has been dispatched on the reported trouble before the trouble ticket is canceled by AT&T, a TIC will be applied.
  - 6.2.20.1.2 AT&T will coordinate combined testing or repair activities until trouble is resolved. U S WEST shall provide repair updates to AT&T. For trouble isolation both Parties will cooperatively test to isolate the trouble as required.

#### 6.3 Systems Interfaces and Information Exchanges

- 6.3.1 U S WEST shall cooperate with AT&T to establish a real-time, electronic interface to U S WEST's maintenance systems and databases. This system shall be based on existing and future uniform industry standards being worked in T1M1 standards committee and Electronics Communications Implementation Committee ("ECIC") industry forum.
  - 6.3.1.1 An electronic bond will be a system to system connection with immediate update capability. In no way shall this interface cause AT&T personnel to use U S WEST systems via remote hook up or any other means of access.
  - 6.3.1.2 This interface shall allow AT&T personnel to perform the following functions for AT&T Customers: (a) enter trouble reports in the USWEST maintenance systems for an AT&T Customer, (b) retrieve and track current status on all AT&T Customer trouble report; (c) receive "estimated time to repair" (ETTR) on a real-time basis; (d) receive immediate notification in the event a repair person is unable to be present for, or anticipates missing, a scheduled repair appointment; (e) retrieve all time and material charges that apply to AT&T at the time of ticket closure (itemized by time spent,

price of materials used, procedures employed, amounts incurred in each such category, and total by Customer, per event; and (f) receive automated notification of case closure.

- 6.3.1.3 Automated interfaces must be provided into a centralized operations support systems database for real time network monitoring to proactively identify potential service degradation. Such systems must monitor and report on the integrity of the U S WEST network, isolate trouble and, where applicable (e.g., when an unbundled loop is connected to an unbundled port or when an unbundled loop includes such equipment as DCS, D4, etc.) initiate repair operations, test individual unbundled loops and generate maintenance and repair notices that impact any end user's ability to complete calls. Ongoing maintenance practices on such unbundled loops must be equal to or exceed the practices employed by U S WEST for facilities used to provide Services for Resale.
- 6.3.1.4 U S WEST agrees to develop and implement, as soon as possible, with a target date of November 1, 1997, the electronic interfaces described above.
- 6.3.2 U S WEST agrees that AT&T may report troubles directly to a single U S WEST Repair/Maintenance Center for both residential and business Customers. The Repair Center will have two separate numbers, one for residence and one for business. AT&T's Customers will be treated in the same manner as U S WEST Customers.
- 6.3.3 U S WEST shall perform all testing for Resale Services. U S WEST shall provide the capability for AT&T to receive MLT test results while AT&T customer is on line during the initial trouble report, when technically feasible in the U S WEST network.
  - 6.3.3.1 U S WEST shall provide test results to AT&T, if appropriate, for trouble clearance. In all instances, U S WEST will provide AT&T with the disposition of the trouble.
- 6.3.4 U S WEST shall provide to AT&T the ability to obtain the status on open maintenance trouble reports via telephone or by another interface as agreed to by the Parties. U S WEST agrees to provide the status of residence and small business trouble reports upon AT&T request.
- 6.3.5 U S WEST agrees to provide to AT&T the status for open maintenance trouble reports for large business Customers anytime the status of the trouble report changes or upon AT&T request.
- 6.3.6 U S WEST agrees that AT&T may call U S WEST to verify central office features and functions as they relate to an open trouble report. U S WEST agrees to work with AT&T on the initial trouble report to isolate the cause of the trouble and, where possible, resolve the feature/function related trouble at that time.
- 6.3.7 USWEST agrees to proactively advise AT&T of any central office failure that is known at the time of any inquiry or trouble report. USWEST agrees to continue to

- work with AT&T toward implementing a process to meet AT&T requirements for notification of switch failures as soon as possible.
- 6.3.8 US WEST agrees to provide an Estimated Time To Repair (ETTR) on all residence and small business trouble reports.
- 6.3.9 US WEST agrees to develop, with AT&T's cooperation, mutually acceptable workcenter interface agreements to document methods and procedures for interim and final interfaces for each service within (30) thirty days after AT&T notice to US WEST of its initiation of that service.
  - 6.3.9.1 After the initial deployment of the workcenter processes, U S WEST agrees to continue working with AT&T to further develop, improve and refine the operational process described in this Agreement.
- 6.3.10 US WEST agrees to provide AT&T with repair history of previous trouble reports on customer service of open trouble report.
- 6.3.11 US WEST shall provide AT&T with the capability to cancel a trouble report.
- 6.3.12 US WEST shall provide AT&T with the capability to modify a trouble report.

#### 6.4 Standards

- 6.4.1 Maintenance charges for premises visits by U S WEST employees or contractors shall be billed by AT&T to its Customer.
  - 6.4.1.1 US WEST employees or contractors shall present the Customer with an AT&T provided, AT&T-branded form detailing the time spent, the materials used and an indication that the trouble has either been resolved, or that additional work will be necessary in accordance with the provisions of this Agreement.
  - 6.4.1.2 If additional work is required, U S WEST employees or contractors shall call AT&T from the Customer premises so that AT&T can schedule a new appointment with U S WEST and Customer at the same time.
- 6.4.2 U S WEST agrees to work with AT&T to support expeditious development of an industry standard trouble report entry format and agrees to implement such standard within sixty (60) days after final resolution by the Network Operation Forum (NOF).

# 6.5 Performance Measurements and Reporting

#### 6.5.1 Cycle Time Measurements

[Intentionally left blank for numbering consistency]

- 7. Miscellaneous Services and Functions
  - 7.1 [Intentionally left blank for numbering consistency]
  - 7.2 [Intentionally left blank for numbering consistency]
  - 7.3 Performance Measurements and Reporting
    - 7.3.1 [Intentionally blank for numbering consistency]9
    - 7.3.2 [Intentionally blank for numbering consistency] 10
    - 7.3.3 AT&T may, at its discretion, further request additional and/or modified reporting as business needs demand.

<sup>9</sup> Procedural Order, July 14, 1997, pages 19-20.

Procedural Order, July 14, 1997, pages 19-20.

# INTERFACE REQUIREMENTS FOR PRE-ORDERING, ORDERING, PROVISIONING, MAINTENANCE AND REPAIR, AND BILLING

#### **PURPOSE**

#### 1. Purpose

1.1 This Attachment 6 sets forth the interface requirements for pre-ordering, ordering and provisioning, maintenance and repair, and billing, where AT&T provides service to its customers through resale of U S WEST Local Services or through the use of Unbundled Network Elements and Combinations.

#### 2. Use of Standards

2.1 As described below, AT&T and U S WEST agree to implement each interface described below based upon existing and evolving industry standards or as mutually agreed upon. The Parties shall transition the electronic interfaces to industry standards within a time frame mutually agreed to.

#### 3. Reimbursement

3.1 Reimbursement for operational interfaces shall be as determined by the appropriate regulatory agency as set forth in this Agreement.

# 4. Scope

- 4.1 This Attachment addresses the real-time transaction-based protocols and transport networks that will be used to exchange information for:
  - Preorder/Ordering/Provisioning for Service Resale (SR) and Customer-Specific Unbundled Network Elements (UNEs)
  - Maintenance/Repair for SR and UNEs

It also addresses the batch protocols and transport networks that will be used to exchange information for:

- Recorded Customer Usage for SR and UNE
- Wholesale Billing for SR and UNE
- Recorded Usage Receivables for UNE
- Local Account Maintenance for SR and UNE
- Directory Assistance Database

The preceding list of information to be exchanged is intended to be exemplary and does not represent a comprehensive list of such information to be exchanged between the parties.

4.2 AT&T and US WEST will use at least one method of exchanging preorder information which will be real-time transaction-based. AT&T and US WEST may also assess and determine the arrangements and conditions to support Batch file transmittal for certain types of preorder information related to the Street Address Guide and Switch/Feature/Facility availability.

# 5. System Interfaces

- For Pre-order, Order and Provisioning, an exchange protocol, such as that based upon a subset of Common Management Interface Protocol (CMIP) transactions referred to as Electronic Communications-Lite (EC-Lite), will be used to transport Electronic Data Interchange (EDI) formatted content. AT&T and U S WEST will use a TCP/IP based transport network for the exchange of EDI transactions. AT&T and U S WEST will translate ordering and provisioning requests from the Ordering and Billing Forum (OBF) forms into EDI transactions using mutually agreed to mappings. The Service Order SubCommittee (SOSC) of the Telecommunications Industry Forum/Electronic Data Interchange (TCIF/EDI) committee interpretations of the 850, 855, 860, 864, 865, 870, and 977 transactions, in accordance with the OBF forms, will be used to convey all the necessary data to connect, modify or disconnect local exchange services.
- 5.2 For Maintenance and Repair, the CMIP transactions referred to as Electronic Bonding Trouble Administration (EB-TA) will be used. AT&T and U S WEST will use an X.25 transport network which is the currently defined standard.
- 5.3 For Billing, AT&T and USWEST will use EDI 811 and OBF Billing Output Specification (BOS) formats via CONNECT:Direct. Section 13 further defines the conditions when one or the other format will be used.
- 5.4 For Local Account Maintenance (LAM), AT&T and USWEST agree to use CONNECT:Direct.
- 5.5 For Directory Assistance Database Information, AT&T and U S WEST agree to use a batch protocol and transport network that is yet to be determined and will be addressed in the Joint Implementation Agreement (JIA) described in Section 18 of this Attachment.
- 5.6 Modifications to OBF forms that are required due to the absence of, or existence of unnecessary data fields, contents, or formats will be addressed in the Joint Implementation Agreement described in Section 18 of this Attachment ("JIA").

#### 6. Real Time Performance

- 6.1 The pre-order real time interface will support the AT&T customer contact as executed within AT&T's Sales and Service Centers. Gateway-to-gateway query-response cycle time performance requirements will be specified as part of the Joint Implementation Agreement described in Section 18 of this Attachment.
- The transaction response time U S WEST provides to AT&T Sales and Service Center will be equal in quality with that which U S WEST provides to itself or other telecommunications carriers. For purposes of this Attachment, U S WEST agrees to provide AT&T benchmarking information for end-user performance based on transaction volumes (nominal light volume, standard typical volume, and worst case heavy volume)AT&T. AT&T may request an improvement in the transaction response time U S WEST provides to AT&T's Sales and Service Center above that which U S WEST provides to itself or other telecommunications carriers through the Bona Fide Request process (as that process is defined in the Part A of this Agreement) should cycle times not meet AT&T's business requirements.

# 7. Compliance with Industry Standards

- AT&T and U S WEST agree to discuss the modification of these interfaces based upon evolving standards (e.g., data elements, protocols, transport networks, etc.) and guidelines issued by or referenced by relevant Alliance for Telecommunication Industry Solution (ATIS) committees. Establishment of new, or changes to, industry standards and guidelines will be reviewed on no less than an annual basis commencing on the Effective Date of this Agreement. This review will consider standards and guidelines that have reached final closure as well as those published in final form. Both parties agree to evaluate evolving standards and mutually determine the relevant modification to be implemented based upon the latest approved version adopted or the latest version reflecting final closure by the relevant (ATIS) committee or subcommittee. The parties will use reasonable effort to reach closure upon the necessary changes within no more than three (3) months of initiating each review and to implement the changes within nine (9) months or earlier, if reasonably possible, unless there is mutual agreement to a different implementation schedule.
- 7.2 In the course of establishing operational ready system interfaces between U S WEST and AT&T to support Local Service delivery, AT&T and U S WEST may need to define and implement system interface specifications that are supplemental to existing standards. Where mutually agreed to, AT&T and U S WEST will submit such specifications to the appropriate standards committee and will work towards its acceptance as a standard.

#### 8. Scheduled Availability

- 8.1 AT&T and U S WEST agree to an operational/production readiness as soon as possible with a target date of November 1, 1997¹ for the delivery of all systems interfaces described within this document, with the mutual understanding that (1) product delivery content is dependent on requirements definition and the time required to develop to these requirements and (2) operational readiness is dependent upon satisfactory test results for the transaction volumes projected by AT&T. AT&T and U S WEST agree to work to mutually identify, prioritize and track those functions which may need to be positioned in a subsequent systems interface delivery. These functions will be jointly reviewed to define the time frame for development of subsequent releases of the system interfaces and establish mutually agreeable delivery dates.
- 8.2 AT&T and USWEST agree that project schedules, timelines, milestone deliverables, reporting processes, among others, will be specified in the Joint Implementation Agreement (Section 18). These schedules and deliverables will be reviewed and revised as needed as part of regularly scheduled meetings conducted throughout the development/implementation cycle.

#### 9. Pre-Order

9.1 The Parties agree that the exchange of preordering information for resale services and for services provided using UNEs will be transmitted over the same interface.

7/18/97

Arizona Bench Order, May 28, 1997 Hearing, p. 1508.

9.2 and USWEST will establish a transaction-based electronic communications interface based upon the most current (as of the Effective Date of this Agreement) version of the Service Order Subcommittee (SOSC) implementation guideline for Electronic Data Interchange (EDI). An exchange protocol, such as Electronic Communications-Lite (EC-Lite) will be used to transport EDI formatted content necessary to perform inquiries including but not limited to: switch/feature/facility availability, address verification, telephone number assignment, appointment scheduling, and customer service record requests. Without limiting other restrictions which may apply, customer service records are provided for the limited purpose of supporting the resale of USWEST local exchange services by AT&T or the sale of unbundled elements on behalf of that Customer. The use of records in a manner not associated with the ordering process, is expressly forbidden, and is a violation of the terms of this Agreement.

### 10. Order and Provisioning

- When AT&T is the customer of record for the resold local exchange service(s), the exchange of information relating to the ordering and provisioning of local exchange service will be based upon the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 Standards as documented by the SOSC of the Telecommunications Industry Forum/Electronic Data Interchange (TCIF/EDI) committee. The Implementation Guidelines for Electronic Data Interchange EDI Guidelines Customer Services Issue 7 will be used as a baseline for implementation despite the fact that this document may not have reached final approval stage by the Effective Date of this Agreement. An exchange protocol, such as EC-Lite will be used to transport EDI formatted content. The information exchange will be forms-based, using Local Service Request (LSR) Form, End User Information Form, and the Resale Service Form developed by the OBF as specified in the August 1996 version of the OBF forms in Bellcore SR STS-4710XX, and for Directory Listings, included with a local service request, as specified in SR STS-471102.
- The end-user specific UNE order will be based upon OBF LSR forms. The applicable SOSC implementation guidelines described previously also apply to the End-user Specific Provisioning UNE orders. U S WEST and AT&T agree that the information exchange will be forms-based using the Local Service Request Form, End User Information Form, Loop Service Form (which may ultimately be renamed the Loop Element form) and Port Form (which may ultimately be renamed the Switch Element Form) developed by the OBF. End-user-specific Network Elements, or Combinations thereof, to be supported in UNE orders shall be as permitted in this Agreement for unbundled Network Elements and subject to FCC and state regulatory requirements.
- Subject to regulatory direction or mutual agreement relative to the requirement of providing combinations of UNE components, AT&T and U S WEST will establish a method to relate, track and process as a single entity the individual U S WEST-provided End-user-specific UNE components specified at the time of the initial order.
- 10.4 AT&T and U S WEST will use the same transaction-based protocol, such as EC-Lite, and transport network specified for service resale for End-user specific UNE orders.

- The ordering of common use (non-end-user-specific) UNEs, as may be permitted under this Agreement for unbundled elements and subject to FCC and state regulatory requirements, will be supported by a process separate from that described in the preceding paragraphs for end-user-specific UNEs, such system to be the same or similar to the mechanized process used for trunk service requests or another process or system as appropriate and determined by mutual agreement. Unless U S WEST is otherwise required by AT&T, this process will not employ the electronic interfaces specified in this Attachment, unless modified by separate agreement. US WEST will support, if and to the extent required by law, this Agreement or as mutually agreed to, Interconnection and operation of End-user-specific UNEs used in combination with common use UNEs. The systems and ordering process as outlined herein is separate and apart from the Bona Fide Request process agreed to by the parties. The Joint Implementation Agreement (Section 18 of this Attachment 6) will address the details related to defining a mechanism to correlate End-user-specific UNE orders placed via system interfaces with Common Use UNEs that may have been previously ordered.
- US WEST will accept an 860 transaction that contains the complete refresh of the previously provided order information (under the original 850 transaction) simultaneously with the delivery of supplemental (new/revised) information from AT&T, subject to mutually agreed upon business rules. This treatment with respect to the 860 transaction will be accepted by both parties until the SOSC explicitly clarifies the information exchanges associated with supplementing orders, or AT&T and U S WEST mutually agree to change the treatment.

#### 11. Maintenance and Repair

- 11.1 The exchange of maintenance and repair information, for both U S WEST retail local exchange services to be resold by AT&T and for services AT&T provides using a U S WEST UNE or combinations of U S WEST UNEs, will be transmitted over the same interface.
- 11.2 For the purpose of exchanging fault management information, AT&T and USWEST will establish an electronic bonding interface, based upon ANSI standards T1.227-1995 and T1.228-1995, and Electronic Communication Implementation Committee (ECIC) Trouble Report Format Definition (TRFD) Number 1 as defined in ECIC document ECIC/TRA/95-003, and all standards referenced within those documents. The parties will use the functions currently implemented for reporting access circuit troubles. These functions include, but are not limited to: Enter Trouble, Request Trouble Report Status, Add Trouble Information, Modify Trouble Report Attributes, Trouble Report Attribute Value Change (AVC) Notification and Cancel Trouble Report, all of which are fully explained in ANSI T1.227/T1.228-1995. Additional functions not currently implemented by the parties or defined by the standards may be supported by mutual agreement (e.g. Test Access and Trouble History).
- 11.3 Modifications that are required due to the absence of, or existence of unnecessary data fields, contents, or formats will be addressed in the Joint Implementation Agreement (JIA) described in Section 18 of this Attachment 6.

#### 12. Recorded Customer Usage

12.1 U S WEST will record the mutually agreed upon Customer usage data that AT&T

requires for its retail local service Customers. The content of such data will be based upon a mutually agreeable interpretation of the BellCore Exchange Message Record (EMR) format to be documented within the JIA. U S WEST will provide electronic transmission of the recorded data using CONNECT:Direct daily on Monday through Friday on a schedule to be determined in the Joint Implementation Agreement (excluding holidays). This interface and format will be used to deliver recorded usage when AT&T is reselling retail local exchange services of U S WEST and when usage is associated with Customers served by AT&T through one or more UNEs provided by U S WEST. AT&T and U S WEST will mutually agree upon the conditions when Customer usage data recording will be provided on behalf of AT&T.

# 13. Billing Format for Service Resale (SR) and Unbundled Network Elements (UNE) Payables

- 13.1 Billing information for unbundled loop and port elements that are flat-rated will be provided in a single EDI 811 format across all USWEST regions via Connect:Direct. Billing information for unbundled trunks/interoffice transport elements that are flat-rated will be provided in a BOS format via Connect:Direct and will appear in the Customer Service Record of the facility bill. Billing information for SR products and services that are flat rated will be provided in a single EDI 811 format across all USWEST regions via Connect:Direct. Exceptions include, but are not limited to, frame relay which will be provided in a BOS format via Connect:Direct. The display of rating codes and the associated charge will be mutually agreed upon in both formats. Charges associated with a specific loop will reflect the circuit ID format.
- 13.2 For usage-rated billing, U S WEST will issue bills to AT&T for SR/UNE in the formats described under the flat-rated SR/UNE billing section. Usage-rated billing for SR/UNE will be uniquely identified and displayed in the Usage Sections of the bill. For products using BOS format, jurisdiction will be specified per BOS guidelines. Conversation time, by chargeable traffic type, will be displayed and billed per applicable tariffs. Delivery of usage-rated SR/UNE bills will be provided as described under the flat-rated SR/UNE billing section.
- 13.3 UNEs which U S WEST agrees to provide, under the terms and conditions of the Agreement, or to the extent required by law, that are recombined as a single service, will be grouped together by U S WEST and displayed together on the bill.

# 14. Recorded UNE Local or Access Usage Receivables

- 14.1 US WEST will record all agreed upon originating and terminating usage billed to and associated with a UNE provided by US WEST to AT&T. The usage recorded will be in the same BellCore Exchange Message Record format discussed within Section 12 and will be subject to the same terms and conditions for modification and/or replacement of the format as discussed in Section IX.
- AT&T and USWEST will mutually agree upon the Local and Long Distance access customer usage data recording that USWEST will provide to AT&T consistent with FCC and State regulatory guidelines and requirements, so that AT&T may bill other carriers for the local and exchange access usage charges to which AT&T is entitled, if any. AT&T and USWEST will perform mutually agreeable systems testing, as documented in the Joint Implementation Agreement (Section 18), as soon as possible with a target date of November

1, 1997.<sup>2</sup>

14.3 U S WEST will provide electronic transmission of the recorded usage using CONNECT:Direct daily on Monday through Friday on a schedule to be determined in the Joint Implementation Agreement (excluding holidays). The same or similar interface used for delivery of recorded customer usage, discussed in Section 12, will be used for delivery of the recorded usage discussed in this section.

#### 15. Local Account Maintenance

- 15.1 When acting as the switch provider for AT&T, where AT&T either is reselling retail services of USWEST or employing UNEs to provide local service, USWEST will notify AT&T whenever the local service Customer transfers service from AT&T to another local service provider. USWEST will provide this notification via CONNECT:Direct using a mutually agreeable 4-digit Local Use Transaction Code Status Indicator (TCSI) that will be used to indicate that the retail customer is terminating local service with AT&T. This notice will be provided on the next processing day after implementing the transfer, where processing days are Monday through Friday (excluding holidays). The TCSI, sent by USWEST, will be in the 960 byte industry standard CARE record format.
- 15.2 AT&T and US WEST will process account changes that affect only the presubscribed intraLATA and/or interLATA toll provider (PIC) via a change service order form using the same EC-Lite transaction based protocol and transport network employed for ordering resale service as specified in Section 10.
- 15.3 When appropriate regulatory guidelines exist, U S WEST will use the industry standard CARE message TCSI 3148 to reject an IXC initiated change of the Primary Interexchange Carrier (PIC), where U S WEST is the switch provider either for the retail local services of U S WEST that AT&T resells or UNEs of U S WEST that AT&T employs in providing service.
- 15.4 Agreement by U S WEST and AT&T to the Local Account Maintenance described above does not, in any way, set a precedence or remove any obligation for U S WEST and AT&T to work towards an industry solution for supporting customer movement between and among other ILECs and CLECs.

#### 16. Directory Assistance Database

- 16.1 AT&T and U S WEST will use a batch protocol and transport network to exchange Directory Assistance Database information similar to existing U S WEST listings products (i.e., DA EUSL, DA EUSL Updates). The specific protocol and transport network to be used has not been determined or mutually agreed to and will be specified in the JIA.
- 16.2 Without limiting other restrictions which may apply, directory service Listing products are provided for the limited purpose of supporting provision of services as outlined in this Agreement. The use of Listings in a manner not associated with this use, is expressly forbidden, and is a violation of the terms of this Agreement.

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# 17. Testing and Acceptance

- 17.1 The Parties will test the interfaces developed under this Attachment. The intent of the end-to-end integrity testing is to establish, through the submission and processing of test cases, that transactions agreed to by AT&T and U S WEST will successfully process, in a timely and accurate manner, through both parties' supporting OSS as well as the interfaces. Irreconcilable differences regarding the interpretation of operational status of the interfaces will be handled through the Dispute Resolution Process as defined in Section 27 of Part A of this Agreement.
- 17.2 An interoperability testing suite shall ensure the implementation of functions, capabilities, and acceptance criteria enumerated in the JIA, with both Parties agreeing to resolve any material defects in the software.
- 17.3 The test process shall include a series of tests in which the transactions, representative of the predominant business transactions associated with local customer servicing, are performed side-by-side using the mediated access gateway interface to U S WEST Legacy systems and the Legacy system interface utilized by U S WEST service representatives and repair attendants. The purpose of this series of tests will be to verify that the performance and response times visible to a user of the mediated access gateway for nominal and worst case scenarios with the same level of quality in accordance with the Act.
- 17.4 U S WEST does not warrant that its systems and access to those systems will be error-free.
- 17.5 Products and services already billed via the Integrated Access Billing System (IABS) will be included in the existing pre-bill certification process for general availability and a re-certification process conducted in accordance with current practices. For products and services billed outside of IABS, the parties will work towards establishing a mutually agreed upon pre-bill certification process.
- 17.6 AT&T and U S WEST agree that metrics are required in order to monitor the performance and assure the on-going delivery of non-discriminatory access to U S WEST systems for pre-order/ordering/provisioning, maintenance/repair, billing, and Directory Assistance databases. A performance measurement plan that addresses the definition, measurement, and review of quality, timeliness, accuracy and availability of each interface and associated transactions or files will be jointly developed and documented within the JIA for each interface.
- 17.7 AT&T and U S WEST agree to periodic status meetings to review the overall progress toward introducing fully operational interfaces capabilities, as soon as possible with a target date of November 1, 1997.<sup>3</sup>
- 17.8 Results of testing shall be considered Confidential Information, except that such results may be provided pursuant to this Agreement and law.
- 18. Joint Implementation Agreement Development
  - 18.1 AT&T and U S WEST recognize that the preceding provisions are not sufficient to resolve all, technical and operational details related to the interfaces described. Therefore, AT&T and U S WEST agree to document the additional, technical and

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operational details in the form of a Joint Implementation Agreement (JIA). The purpose of the JIA is to establish the working details of the systems interfaces between the two parties, and as such, they will not be submitted to the Commission for approval as amendments to this Agreement. These JIA may be modified, by mutual agreement, over the life of the Agreement without subjecting the balance of the Agreement to renegotiation or modification.

- Both parties further agree that any technical, operational or implementation issues directly associated with the systems interfaces, once identified at the working team level, may be escalated by the initiative of either party thirty (30) days after an issue is identified. The escalation will proceed first to the senior management of both companies who will seek to resolve the issue. Within fourteen (14) days of the Effective Date of this Agreement, AT&T and U S WEST will document the agreed upon escalation process including the names and contact information of responsible senior management. If an issue is not resolved within thirty (30) days following receipt of the issue by senior management, either party may submit the issue to the Alternative Dispute resolution process contained in Section 27 of Part A of this Agreement.
- 18.3 AT&T and U S WEST will document an overall project implementation schedule within sixty (60) days of the Effective Date of this Agreement. This schedule will be mutually binding and can be modified by mutual consent.
- In addition, AT&T and U S WEST agree to document both a topical outline for the JIA, and establish a schedule for identifying, discussing, resolving and documenting resolution of issues related to each aspect of the JIA topical outline for each interface discussed in this document. In no case will either end-to-end integrity testing or load testing begin without both parties mutually agreeing that each interface JIA documents the intended operation of the interface scheduled for testing. In the event the parties cannot agree prior to one hundred and twenty (120) days of the operational/production readiness date for delivery of all system interfaces described within this Attachment, disputes over the sufficiency of documentation will be submitted to arbitration pursuant to the Alternative Dispute Resolution process contained in Section 27 of Part A of this Agreement.
- By mutual agreement, specific paragraphs or entire sections of this Agreement may be identified and documented to serve the purpose described for the Joint Implementation Agreement for specific interfaces. Any issues identified and subsequently resolved through either the end-to-end integrity or load testing processes will be incorporated into the impacted interface section of the JIA within thirty (30) days of issue resolution.
- 18.6 An illustrative outline for a JIA follows:
  - Introduction
  - Purpose of Joint Implementation Agreement
  - · Terms of Agreement
  - "System" Interface
    - · Business Process and Data Requirements
    - Overall Responsibilities
    - · Identification & Definitions of Activities
    - Information To Be Provided Per Transaction
    - Process Information for Each Activity & Transaction
  - Delivery Criteria

- Data Standard
- Message Protocol
- Transmission Protocol
- Destination
- Frequency Of Data
- · Deviations to Generic Specification
- Error Processing
- · Process for Notification of Late Transmittals
- Escalation & Expedite Procedures
- Transaction Response Times
- File Format Specifications
- Rules for the Physical Interface
- File Structure
- Data Format
- Error Controls
- Physical Tape Specifications
- Site Information
- Contact Person
- Transmission Hours
- Testing
  - Cooperative Testing
  - Pairwise Testing
  - ETE Testing
  - Test Order ETE (Employees)
  - · Future Testing Requirements
- Interface Metrics
  - Data Timeliness
  - Data Completeness
  - Data Accuracy
- Contact Information
  - Contacts/Escalation Contacts
  - Schedules for Center Operations (days/hours of Operation)
- Data Requirements
  - Retention of Data
  - Back-up and Recovery Procedures
  - Disaster Recovery
  - System Change Notification
  - Guarding of Proprietary Data
- Reporting Information
  - Reports to be Generated
  - Frequency
  - Data Requirements
  - Transmission
- Change Control Process
- Issue Resolution Process
- · Termination of Interface Notification

#### IMPLEMENTATION SCHEDULE

#### 1. Local Service Resale

1.1 Within ninety (90) days of the Effective Date of this Agreement but no later than October 1, 1997, U S WEST shall provide for resale all services designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

# 2. Unbundled Network Platform (All Network Elements in Combination)

Within one hundred and twenty (120) days of the Effective Date of this Agreement, but no later than November 1, 1997, U S WEST shall offer all services, Network Elements and any Combinations thereof designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

### 3. Interconnection Trunking for Local Service

3.1 Upon the Effective Date of this Agreement, within thirty (30) days of a request by AT&T for trunking to specific locations, or such other time period as the Parties may mutually agree, U S WEST shall provide interconnection trunk groups necessary for the mutual exchange of traffic or combined trunk groups as necessary or required for efficiency and interconnection billing to locations specified by AT&T. Such thirty (30) day period shall apply only to the provision of existing transmission facilities. Subsequent to the thirty (30) day period following the Effective Date of this Agreement, interconnection trunk orders shall be processed as specified in this Agreement and/or adopted by the Commission.

# 4. Ancillary Trunking

- 4.1 Within ninety (90) days after the Effective Date of this Agreement, but no later than November 1, 1997, U S WEST shall provide:
  - 4.1.1 E-911 Trunking in cooperation with AT&T;
  - 4.1.2 SS7 Interconnection and Certification in cooperation with AT&T; and
  - 4.1.3 Directory Listings Arrangements and Directory Assistance Interconnection.

#### 5. Unbundled Loops

5.1 Within sixty (60) days after Collocation has been provided pursuant to the terms of this Agreement, U S WEST shall provide unbundled loops at designated end offices. Subsequent unbundled loops should be made available pursuant to ordering intervals as specified in this Agreement and/or adopted by the Commission.

#### 6. Collocation

6.1 Collocation will be provided upon request pursuant to the terms and conditions of this Agreement.

Procedural Order, July 14, 1997, page 23.

- 7. Access To Poles, Ducts and Rights of Way
  - 7.1 Access to Poles, Ducts and Rights of Way shall be provided upon request, pursuant to the terms and conditions of this Agreement.
- 8. Interim Number Portability
  - 8.1 Interim Number Portability capabilities, as specified in this Agreement, shall be made available in specified locations ninety (90) days after the Effective Date and within appropriate service order windows thereafter. Interim Number Portability shall be capable of being ordered electronically with a target date of December 1, 1997.
- 9. Operational Support System
  - 9.1 AT&T and U S WEST agree to an operational/production readiness as soon as possible with a target date of November 1, 1997<sup>2</sup> or at such later date as the Parties may agree.

Arizona Bench Order, May 28, 1997 Hearing, p. 1508.
Draft U S WEST/MCIm/AT&T Interconnection Agreement - Arizona

#### IMPLEMENTATION SCHEDULE

#### 1. Local Service Resale

1.1 Within ninety (90) days of the Effective Date of this Agreement but no later than October 1, 1997, U S WEST shall provide for resale all services designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

# 2. Unbundled Network Platform (All Network Elements in Combination)

Within one hundred and twenty (120) days of the Effective Date of this Agreement, but no later than November 1, 1997, U S WEST shall offer all services, Network Elements and any Combinations thereof designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

#### 3. Interconnection Trunking for Local Service

3.1 Upon the Effective Date of this Agreement, within thirty (30) days of a request by AT&T for trunking to specific locations, or such other time period as the Parties may mutually agree, U S WEST shall provide interconnection trunk groups necessary for the mutual exchange of traffic or combined trunk groups as necessary or required for efficiency and interconnection billing to locations specified by AT&T. Such thirty (30) day period shall apply only to the provision of existing transmission facilities. Subsequent to the thirty (30) day period following the Effective Date of this Agreement, interconnection trunk orders shall be processed as specified in this Agreement and/or adopted by the Commission.

#### 4. Ancillary Trunking

- 4.1 Within ninety (90) days after the Effective Date of this Agreement, but no later than November 1, 1997, U S WEST shall provide:
  - 4.1.1 E-911 Trunking in cooperation with AT&T:
  - 4.1.2 SS7 Interconnection and Certification in cooperation with AT&T; and
  - 4.1.3 Directory Listings Arrangements and Directory Assistance Interconnection.

#### 5. Unbundled Loops

5.1 Within sixty (60) days after Collocation has been provided pursuant to the terms of this Agreement, U S WEST shall provide unbundled loops at designated end offices. Subsequent unbundled loops should be made available pursuant to ordering intervals as specified in this Agreement and/or adopted by the Commission.

#### 6. Collocation

6.1 Collocation will be provided upon request pursuant to the terms and conditions of this Agreement.

Procedural Order, July 14, 1997, page 23.

# 7. Access To Poles, Ducts and Rights of Way

7.1 Access to Poles, Ducts and Rights of Way shall be provided upon request, pursuant to the terms and conditions of this Agreement.

# 8. Interim Number Portability

8.1 Interim Number Portability capabilities, as specified in this Agreement, shall be made available in specified locations ninety (90) days after the Effective Date and within appropriate service order windows thereafter. Interim Number Portability shall be capable of being ordered electronically with a target date of December 1, 1997.

# 9. Operational Support System

9.1 AT&T and U S WEST agree to an operational/production readiness as soon as possible with a target date of November 1, 1997<sup>2</sup> or at such later date as the Parties may agree.

Arizona Bench Order, May 28, 1997 Hearing, p. 1508.

Draft U S WEST/MCIm/AT&T Interconnection Agreement - Arizona

# FIRST AMENDMENT

# DATED SEPTEMBER 25, 1997 TO AGREEMENT FOR LOCAL WIRELINE INTERCONNECTION AND LOCAL SERVICE RESALE

# (Arizona)

First Amendment (this "Amendment") dated September 25, 1997 to Agreement for Local Wireline Interconnection and Local Service Resale (Arizona) entered into between U S WEST Communications, Inc. ("USWC") and AT&T Communications of the Mountain States, Inc. ("AT&T").

#### Recitals

- A. U S WEST and AT&T have entered into the Agreement for Local Wireline Interconnection and Local Service Resale effective July 20, 1997 (the "Agreement").
- B. Pursuant to an Order dated August 29, 1997, the Arizona Corporation Commission (the "Commission") has ordered that AT&T and U S WEST incorporate within the Agreement language approved by the Commission pursuant to such order and file confirmation of such incorporation with the Commission.
- C. The parties desire to incorporate such language in the Agreement by means of this Amendment.

#### Amendment

Now therefore, the parties agree to amend the Agreement as follows:

- Paragraph 1.2.2 of Attachment 3 of the Agreement is deleted in its entirety and replaced with the following:
  - U S WEST shall offer each Network Element individually and in Combinations as required by law, with any other Network Element or Network Elements in order to permit AT&T to combine such Network Element or Network Elements obtained from U S WEST or with network components provided by itself or by third parties to provide Telecommunications Services to its subscribers. AT&T may purchase unbundled Network Elements individually or in Combinations that U S WEST currently combines, without restrictions as to how those elements may be rebundled by AT&T.
- Paragraph 3.2.15.1 of Attachment 5 of the Agreement is deleted in its entirety and replaced with the following:

AT&T may order individual and/or multiple unbundled Network Elements, and combinations of unbundled Network Elements as required by law, on a single order. AT&T may order Unbundled Network Elements without restriction as to

how those elements may be rebundled. Except upon request, U S WEST shall not separate network elements that are currently combined.

Except as otherwise amended pursuant to this Amendment, the Agreement remains unmodified and in full force and effect.

EXECUTED this 110 day of September, 1997

AT&T Communications of the Mountain

States, Inc.

Intombs (PERTO

Title: 1 & GA Vier President

U S WEST Communications, Inc

Kathy Fleming

Title: Executive Director - Interconnect

\* Executed as mandated by the Arizona Corporation Commission in Decision No. 60353. Signature does not indicate agreement with the Commission prescribed interconnection agreement nor does it waive any of U S West's rights to seek judicial review or to reform the interconnection agreement following successful judicial review.

# **EXHIBIT LBB-24**

U S WEST, Inc. 1500 7th Avenue, Room 3205 Seeklis, Washington 98191 (206) 345-1574 Facelinije (206) 343-4040

Lies A. Anderi Senior Aliemay Law Department



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Via Facsimile

May 2, 2000

Sally G. Johnston
Office of the Attorney General
1400 S. Evergreen Park Dr. SW
PO Box 40128
Olympia, WA 98504-0128

RE: Joint Application for Merger of Parent Companies of Owest Inc. and U.S. WEST. Inc.

Dear Sally:

I am writing in regard to Covad's submission to you yesterday of a three page agreement between US WEST and Covad. US WEST was willing to provide that document as a confidential document, in accordance with its agreement with Covad that the agreement would remain confidential. However, for reasons which are not clear, Covad did not designate the agreement as confidential. Nevertheless, because it is a confidential agreement between the parties, and because Covad cannot unilaterally waive that confidentiality, US WEST asks that Staff from the agreement as confidential. Additionally, Covad did not submit all of the documents that reflect the agreement between the parties, including the communication from Covad's CEO committing to nondisclosure of the agreement. Therefore, US WEST is providing to you today, on a confidential basis, other documents that are part of the agreement between the parties.

Sincerely,

Lisa A. Anderl

Enclosurer

cc: Clay Deanhardt Gina Spade

Los allde

U 8 WEST, Inc. 1600 7th Avenus, Reom 2005 Sastile, Westington 98131 (208) SAS-1874 Facalinilla (205) 343-4040

Lies A. Anderi Senior Atlemay Law Dopertment



Via Facsimile

May 16, 2000

Mr. Clay Deanhardt Covad Communications 2330 Central Expressway Santa Clara, CA 95050 FA-3 SAULLE JAN COUSE FILL

RE: Docket No. UT-991358

Dear Mr. Deanhardt:

This is in response to your May 15, 2000, letter. You raise two issues – the April 19, 2000 Service Level Agreement between Covad and U S WEST, and the confidentiality of that agreement between the parties.

With regard to the confidentiality of the April 19 letter, US WEST will honor Covad's wishes that it not be treated as confidential. US WEST originally took the position that it was confidential based on its understanding that customers need to have their business relationships with US WEST treated as confidential and not disclosed to third parties except as required by law. However, to the extent that Covad does not wish to treat the April 19 letter as confidential, US WEST will also withdraw its designation of that document as confidential.

You have also expressed a concern about U S WEST's commitment to the April 19th agreement. US WEST takes its obligations with its wholesale customers very seriously. As such, US WEST remains committed to the agreement between the parties, and, as you should be aware, is performing under that agreement.

Please feel free to contact me if we need to discuss these issues further.

Sincerely,

Lisa A. Anderi

John Kelley Received

MAY 1.6 2000

cc: Sally Johnston

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Alex M

TORE OF REST EXECUTIVE OFFICES

# EXHIBIT LBB-25

R. Steven Davis Sr. Vice President Policy and Law

1801 California Street, Suite 4750 Denver, CO 80202 Phone 303 896-4200 Facsimile 303 298-8763



The Honorable Wm. A. Mundell Arizona Corporation Commission 1200 W. Washington Phoenix, AZ 85007

Dear Chairman Mundell:

There has been a lot of publicity over the past few weeks related to certain agreements that Qwest has entered into with competitive local exchange carriers. I am writing to advise you of new policies that Qwest is implementing in this area.

As you may know, ILECs routinely enter into agreements of many kinds with CLECs. Some of them may take effect immediately as in the normal business world. Others must be filed with and pre-approved by state commissions. Qwest itself has filed over 3,200 agreements with CLECs since the passage of the Telecommunications Act, including both initial agreements and amendments. This large number reflects our efforts to work with individual CLECs to meet their specific business needs. However, questions have been raised regarding a relative handful of our arrangements with CLECs. Some parties allege that under Section 252(a) of the Telecommunications Act such agreements also should have first been filed and approved.

Qwest disputes these allegations and is defending the legal line it drew between those agreements that did, and did not, need to be filed. Qwest also has filed a petition with the FCC asking for guidance on where the filing line is drawn.

Meanwhile, however, Qwest is implementing two new policies that will eliminate debate regarding whether Qwest is complying fully with applicable law. First, Qwest will file all contracts, agreements or letters of understanding between Qwest Corporation and CLECs that create obligations to meet the requirements of Section 251(b) or (c) on a going forward basis. We believe that commitment goes well beyond the requirements of Section 252(a). However, we will follow it until we receive a decision from the FCC on the appropriate line drawing in this area. Unless requested by the Commission, Qwest does not intend to file routine day-to-day paperwork, orders for specific services, or settlements of past disputes that do not otherwise meet the above definition.

Second, Qwest has reviewed and is enlarging its internal procedures for evaluating contractual arrangements with CLECs and making all necessary filings. Qwest is forming a committee of senior managers from the corporate organizations involved in wholesale agreements: wholesale business development, wholesale service delivery, network, legal affairs attorneys, policy and law attorneys, and public policy. This committee will review agreements involving in-region wholesale activities to ensure that the standard described above is applied prior to the issuance of an FCC ruling, and that any later FCC decision also is implemented fully and completely.

The Honorable Wm. A. Mundell May 10, 2002

Qwest is implementing these policies to eliminate any question about Qwest' compliance with the requirements of Section 252(a) in this state while Qwest's petition to the FCC is pending. We hope to continue to work with CLECs to meet their individual needs, as we have in the past. This is a practice that we are proud of, and we do not want to see it obscured by controversy over the meaning of Section 252(a), or decisions on line drawing in a small number of situations.

To the extent there are questions or concerns associated with the procedure outlined in this letter, please contact me.

Sincerely,

R. Steven Davis Senior Vice President

Policy and Law

cc: Commissioner Jim Irvin

Commissioner Marc Spitzer

Docket Control